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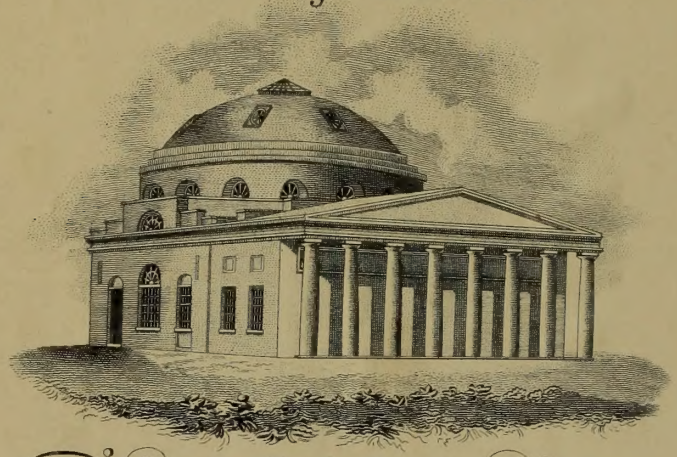

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with
Generated Tables of Contents

These manuscripts, described as either an Inaugural Dissertation or an Inaugural Essay, were presented to the University of Maryland for the Degree of Doctor of Medicine, and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes mentioned multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were: Richard J. Dobler, Historical Librarian/Preservation Officer; Maria Milagros Pickles, Manuscripts Management Librarian; Angela Cochran and Carol Harding-Henry, Reference Division; Sarah Hovde, Amy Schaar and Megan Wolff, Services Division.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive (archive based mostly land-side) and the Internet Archive (www.archive.org).

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UNIVERSITY OF MARYLAND

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Baer, Edward Ridgely	Cholera Infantum	(p.7-19)[2]
Waters, Edmund George	Theory and Practice of Physic	
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[1] Title and pages 1-6 only; pages 7-19 found later in this volume.

[2] Pages 7-19 only; pages 1-6 found at beginning of this volume.

*Noteworthy calligraphy on title page.

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title	Notes
Johnson, Thomas Francis	Circulation of the Blood	(partially faded)
Wallace, James Washington	Phenomena of Pregnancy	(ink bleeds)
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Higgins, H. Lot	Anaesthetics	(partially faded ink)
Carr, Benjamin Augustus	Acute Hepatitis	(torn pages)

* Noteworthy calligraphy on title page.

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UNIVERSITY OF MARYLAND

THESES

1853 (A)

Baer, Edward Ridgely	Cholera Infantum	19p.
Streets, Samuel Wesley	Rubeola	19p.
Waters, Edmund ~~Walers~~, ~~Edward~~ George	Theory and Practice of Physic	32p.
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Sparrow, Lewis Griffith ~~L. G.~~	Diagnosis	25p.
Burdick, Isaac Day	Dyspepsia	25p.
Martin, Hugh	Rubeola	18p.
Hutchings, David	Typhoid Fever	41p.
Walter, Charles	Parturition	21p.
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Mills, Bernard	Intermittent Fever	30p.
Ahl, David	Ulceration of the Os and Cervix Uteri	24p.
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Wallace, James Washington	Phenomena of Pregnancy	48p.
Wallace, Joseph Veasey	Scarlatina	17p.
Shields, John William	Natural ~~Labor~~ Labour	36p.
Stevens, Edward Thomas	Bronchocele	17p.
Powell, John Fletcher	Human, Mental and Physical Economy and Their Mutual Dependance	37p.
Piper, Jackson,	Concussion and Compression	21p.

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Martin, Wm. N.	Typhoid Fever	44p.
Higgins, H. S.	Anaesthetics	25p.
Carr, Benjamin A.	Acute Hepatitis	19p.

An

INAUGURAL DISSERTATION

ON

CHOLERA INFANTUM.

Submitted to the examination of the

PROVOST REGENTS.

AND

FACULTY OF PHYSIC

of the

UNIVERSITY OF MARYLAND

for the degree of Doctor of Medicine,

by

MB 18903

EDWARD RIDGELY BAER

of

MARYLAND

Cholera Infantum.

The prevalence and fatality of the disease called cholera Infantum, or, in more popular phraseology, the summer complaint of children, affords very obvious inducement to the Student of Medicine to make himself as familiar with the subject as his circumstances will permit, in addition to the promptings of personal interest, or the higher one of humanity, which, under circumstances would induce him to undertake the investigation, he finds himself urged to the task by impulses which rank among the most of our natures.

Any one that has been in the habit of examining our weekly bills of mortality is aware of the significant proportion which this disease bears to all other causes of death during the period of its prevalence, during the warm season

it is the cause of much anxiety to numerous families, and of deep anguish to not a few, who are compelled to experience the pangs of bereavement. to this season, indeed, it seems to be exclusively confined; for with the first heat of summer its ravages commence, and with the occurrence of cool weather in Autumn all apprehension of its dreaded influence ceases to exist. Dr Wood says that "it is confined almost entirely to cities, and that it flourishes most in those of largest size and most densely populated;" but its occurrence in the smaller towns and villages is not rare, as the writer can assert upon unquestionable authority. As its name indicates it is a disease of children, and usually affects those between the age of three months and two years, though we sometimes meet with instances

before the first and after the last of these two periods. Popular opinion points to the second summer as a season of great peril, and parents congratulate themselves when their children have passed this period in safety.

Symptoms.— Cholera Infantum usually begins with diarrhoea to which vomiting soon succeeds. In some instances so great is the gastric irritability that everything taken into the stomach is immediately and violently rejected. The stools, at first, are generally of a very light color though often of a pale yellow or green. After the disease has continued a short time the discharges from the bowels are, ordinarily, composed entirely of a perfectly colorless and inodorous fluid, containing often, minute mucous flocculi. Sometimes these discharges are large and come from the patient without any apparent effort. At other times

they are small in quantity "and squirted as it were from the anus" In these cases there is usually more or less tenesmus and tenesmus. Sometimes the discharges from the bowels will increase in frequency and quantity, while the irritability of the stomach diminishes, and the vomiting ceases at an early period of the attack. In these cases whatever food is taken into the stomach passes off rapidly without undergoing the slightest change But in fatal cases of short duration the the vomiting and purging commence simultaneously and continue with little intermission until death comes to the relief of the patient, This may happen in from twenty-four to three or four days and the fatal termination will be ushered by great langour and distress. with more or less spasmodic pain of the stomach and bowels, a cool clammy skin, pallid and shrunken features. half closed eyes

and coma, in addition to the symp-
-toms mentioned above.

In the majority of cases febrile symptoms are manifest from the very commencement of the attack. The pulse is usually quick, small, frequent, and often tense. The skin is dry and harsh, and the head and abdomen are often hot while the extremities retain their natural temperature, or are even decidedly cold. The tongue is moist and covered with a white slimy mucous, and there is always intense thirst. The fever is intermittent, according to writers generally. the exacerbations occuring in the evening and is sometimes attended with delirium or stupor indicating a morbid condition of the brain. In these cases you have, with the delirium, a wild and injected appearance of the eye, and a tossing of the head backwards and forwards is easily manifested. Dr. Condie says," when this

is the case we have frequently seen the patient attempt to bite or scratch his attendants."

According to the same writers, "the disease usually runs a protracted course. The discharges from the bowels continue to be frequent and profuse, but dark-colored like dirty water, and often very offensive, they not unfrequently, however, are small in quantity and consist entirely of a dark colored mucus mixed with the food and drinks that have been taken, The emaciation of the patient becomes extreme, his eyes are languid, hollow and glassy, his countenance pale and shrunken, his nose sharp and pointed, the lips thin dry and shrivelled, the surface of the body becomes cool and clammy, of a dirty, brownish hue, and often covered with petechiae, his tongue is dark colored, cracked and shriveled, and covered as well as the parietes of the mouth with a pitch-like

An
Inaugural Dissertation.
on
Rubeola.
Submitted for Examination.

To the
Provost Regents and Faculty of Medicine.
of the
University of Maryland.

For the
Degree of Doctor of Medicine.

By
Samuel Henry Steele.
of Maryland.

1853

Rubeola Morbilli
Measles.

The above are the technical names for this malady. The German writers applied Morbilli to measles proper, whilst they used Rubeola to express a different affection, which has been called by some Roseola, and which is nearly analagous to measles. This disease is classed among those of the disorders of the blood and is of very ancient origin. It has been frequently confounded with Small pox. And as frequently mistakened for Scarlatina, but if careful attention be paid to the symptoms, and if we are not too hasty in forming our diagnosis we will be convinced in a short time that we have a much milder disease to contend with than we at first expected.

Measles occurs epidemically, and is considered both an infectious and contagious disease. We have for its chief

characteristics an introductory fever, catarrh and its peculiar eruption. The eruption which consists of small red spots, similar to the bite of a flea, of crescentic form, slightly elevated above the cutis, usually makes its appearance on the fourth day, first about the forehead and chin and then spreading over the rest of the face. On the succeeding morning it is visible also on the neck and breast and by the evening has spread over the trunk and finally over the extremeties. The eruption on the face is most vivid generally about the fifth day and on the sixth begins to fade. By the seventh day the eruption on the body, which is at its height on the eight begins to subside: while that on the backs of the hands which was the latest in appearing is likewise the latest in subsiding, seldom begining to fade before the eight. By the ninth days all that usually remains of the eruption on any part of the body is a slight discolouration of the surface which com-

-monly disappears before the end of the tenth day, by which period desquamation of the cuticle over the whole body is completed.

Measles can be conveyed from one person to another: It seldom effects the same person more than once — Its contagious-ness I believe is not doubted but admitted by every author who has given this disease a thought: the system can be effected by inoculation with the serum which is contained in the small papu-lae: It is considered by some to be most con-tagious during the primary fever — The fever which accompanies this disease is continued — The period of incubation is generally from ten days to two weeks or longer — there appears however to be some difference when the disease is propagated by inoculation — it then appearing in a shorter time than ten days. According to Farr, Morbilli is more frequent, less contagious and has longer stages of incubation than scarlet fever: And that

Variola is rarer, rather more contagious and its period of incubation and premonitory stage is shorter than those of the Measles.

Generally Measles is milder when the temperature of the weather is mild, and the different stages will pass through their different phenomena with more regularity, than when the atmosphere is cold and damp, and the temperature continually changing. If the patient has a good constitution it enables him to stand the attack without much inconvenience: We frequently see its varied effects when it seizes upon a family composed of many children, some are confined to their beds, whilst others can sport about at pleasure only effected with slight pains and a little cough. Sometimes the morbillous fever attacks the patient without the usual characteristic eruption appearing, and again we may have the fever unaccompanied by the catarrhal symptoms, with the usual eruption, during

the prevalence of an epidemic, but these forms are not considered as a preventative against the original disease.

Measles is divided into three different classes — The Rubeola Vulgaris, Rubeola Maligna and Rubeola sine catarrho. Children are more effected with this disease than adults, and it usually attacks the juveniles between the ages of three and four years. Adults are more generally prostrated from the attack than the young. It will sometimes leave the symptoms of tubercular disease, more especially if the patient be of a scrofulous diathesis, in whom it will awaken the tubercles which have been lying dormant, and when once developed the skill of the physician is baffled and the patient lingers for a while and death closes the scene.

Symptoms. The symptoms of this disease are first chilliness, cold shiverings, languor with headache, pain in the back and

and limbs, with fever, thirst, copious flow of a watery discharge from the nose, some swelling, redness of the eyes, a flow of tears and tumefaction of the lids: the mucous membrane is generally effected, and we have a dry hoarse cough: the fauces and larynx are somewhat inflamed, there is also anorexia, and we have some diarrhoea and occasionally vomiting. There is some soreness in the fauces, and oppressed respiration, the lymphatic glands of the neck also become swollen. The eruption which as I stated generally appears between the third and fifth day is followed by an increase in the intensity of the fever, and generally continues so throughout the disease, but becomes milder as the eruption commences to fade. Sometimes we have the fever and cough continuing after the usual symptoms have passed away, and more frequently the cough continues for sometime and if the patient is confined to a damp apartment during convalescence the cough will be very trouble-

-some. From the chilliness which ushers in measles, and also the pains in the limbs, back, and head we cannot derive much aid in forming our diagnosis in very young children, they not being able to tell their sufferings to us; we may ascertain however if there is chilliness by feeling the body and more particular the extremities, and by their lingering a-round the fire, and seeking more clothing: they will express their suffering of pain when much moved or handled. The fever is sometimes absent, and in some cases we have the eruption without the fever — but the cases do not often occur; the fever becomes slightly milder about daybreak, and increases during the later part of the day. The fever is accompanied with considerable thirst and lost of appetite, some pain in the head and restlessness, the pulse is increased in frequency and in force but does not run very high — the skin becomes warm and rather dry, and the face is ~~very~~ considerably flushed, the condition of the eyes

and nose are important, as they assist us very materially in forming our diagnosis. We have suffusion of the eyes and stuffing of the nose, but these symptoms differ to some degree from the ordinary cold, being so much more severe — the inflamatory appearance of the fauces, larynx, pharynx are severer about the time of the eruption. The cough at first is slight and considerable cannot be called troublesome or severe to the patient until the fourth day when it becomes dry, hoarse, and occurs in frequent paroxysms. The tone of the voice is somewhat changed to a hoarseness. — in some the bowels are constipated and in others there is a slight attack of diarrhoea, when the diarrhoea appears previous to the coming out of the eruption it is considerable an unfavorable sign, which may cause the eruption to retrocede, but the bowels are generally regular: the tongue presents a white and furred surface: — the patient is generally tormented

-ring the first stage, sleeping for hours and waking only at times to have his wants supplied, water being generally the only thing desired. The catarrhal symp-ptoms are very important to the practitioner in forming his diagnosis of this disease, they are slight and no seriousness may be expected from them without the patient ~~has~~ be carelessly exposed — we sometimes have delirium with coma when the fever becomes high. — we may convulsions in those of a nervous temperament. — in some cases the eruption preceding the convulsions. The eruption which generally makes its appearance on the fourth day may be completed in the course of forty eight hours, the first spots are resembling incipient small pox, it also consists of many different sized papulæ forming them-selves into irregular shapes, the crescentic being the most characteristic, the color of the papulæ is generally that of the raspberry, some being much deeper in color than others, there are some-

- what elevated above the surface of the skin and when pressed upon lose their color for a short time, the papula are more flattened and fine at their points. When the attack of measles is mild the appearance of the papula are rather fewer, and the clusters are seperated some distance from each other, and healthy skin is interposed between, but when the disease is very severe in its nature there will be a very diffused redness over the whole surface of the body, but the papulae can be distinguished upon close examination. When the fever reaches its highest point the irritability of the eyes increase, the defluxion from the nose ceases and the nostrils become dry with crusting, the eyelids are swollen, the cough is hoarse but varies in different patients, generally it is loud hoarse and frequent; the breathing at this period is a little hurried, The tongue remains in most cases moist and clean, with occasionally a slight white or

yellowish fur, but in most cases these complication do not occur. No pain is experienced when pressure is made over the stomach, a slight degree may be felt over the illiac region. The appetite is impaired, there is not that voracious craving of food which we sometimes see in young children, at this stage of the fever, but the desire for drinks is manifested untill the decline of the fever. The strenght of the patient is not materially effected if he enjoyed good health previous to the attack, and possesses a good constitution. The disease generally reaches its height on the sixth day and commences to subside on the eight of the fever fever and second of the eruption. It generally fades first were it first began to appear, and may be seen on the backs of the hands for sometime after it has disappeared from the rest of the body, about the ninth day the eruption presents a faint yellowish appearance

skin, dressed upon, and sometimes appears as if the skin was ecchymosed. Desquamation does not commence by peeling off of large flakes as in scarlatina, it resembles bran or dandruff. The symptoms decline with the disease, the heat of the skin generally passes away with moisture, the pulse becomes less frequent, the cough loses its hoarseness and does not return in such quick paroxysm - the thirst is not so great the appetite returns and the child appears in ordinary health, and soon resumes its former amusements.

Measles as I stated previously is divided into three distinct classes. Rubeola Vulgaris, Rubeola Maligna, and Rubeola sine Catarrho. - Rubeola Vulgaris is so called when the eruption appears before its usual time, and also when the catarrhal symptoms occur for an unusual time before the eruption. - the eruption sometime appearing and then receding.

Rubeola sine Catarrho appears without its usual catarrhal symptoms, and with slight febrile symptoms

Some Authors think however that the absence of these two symptoms do not act as a safeguard against an attack of febrile measles. Malignant Rubeola. this variety is ushered in with no warning, except the violence of the fever, thirst, restlessness, and heat of the skin, it may effect the patient with the ordinary features of typhus, the typhus or typhoidal symptoms commencing at the beginning of the attack, or appearing at the time of the eruption: when they begin at the first stage there is frequency of the pulse, and weakness with prostration, dyspnoea, and oppression and sometimes violent nervous symptoms as delirium and stupor: the appearance of petechiæ (which is one of the typhous peculiarities.) profuse diarrhœa or sweats: the eruption when it makes its appearance is generally purplish or blackish in color. This variety is generally fatal to the patient. Sequelæ. —

The tendency to local inflamation in measles is very great at the time of desquamation or con-

- valescence, especially if the patient be too early, or
- posed to atmospheric vicissitudes, and if patient
of phthisical habits tubercles will be formed very
rapidly. And sometimes abscesses will be formed in
the ears, and also numerous cutaneous affections,
We have in fact more to fear from the complications
than from the original disease, when complication occur
during the stage of the eruption or before it, it will
have a tendency to cause it to retrocede or make it
tardy in its appearance. When we perceive that there
is more drowsiness than usual and there is dyspnoea,
we may ascertain by auscultation and percussion
whether any pulmonic inflamation is going on, and
by so doing, and treating our patients accordingly
we may make the case much milder. Measles may
be complicated with Scarlitina or Erysipilas and
other eruptive diseases. — After death we generally
find a congested state of organs, the mucous membrane
appears chiefly effected which is of a reddish or
purplish cast.
-

Diagnosis. - In forming our diagnosis of measles we may mistake the disease for that of Scarlatina or for Roseola and in the commencement of the attack it may be for Variola. It may be distinguished from Scarlatina by the eruption appearing on the fourth day, in Scarlatina it makes its appearance much ealier from the first to the second day and the absence of the Catarrhal symptoms, which are present in measles. Namely Coryza, sneezing, hoarse dry cough with suffused eyes. the difference also in the eruption which consist of a raspberry efflorescence and the redness is more diffused: whilst in measles the papulæ coalesce and form themselves into irregular crescentic shapes. It may be distinguished from Roseola by the absence of the catarrhal symptoms and the sudden appearance of the eruption: and from Variola the papulæ of which are not so large and flat, but are more pointed.

The appearance of the eruption of measles is more regular, commencing first upon the face and

proceeding downward in regular order. Prognosis.

The prognosis in measles is favourable if the disease passes through its different phenomena which are characteristic of it. if the fever continues gradual, the eruption making its appearance at the usual time, if the progress of the eruption is not retarded by some accidental cause or by too free perspiration, [illegible] of cold which may cause the eruption to retrocede. When the disease is complicated by some internal congestion or inflamation of some important organ the prognosis will generally be unfavourable, but if the disease is mild or of the ordinary violence we may have no doubts of the recovery of the patient. - Treatment. The treatment of measles is rather simple, and entirely expectant, requiring few medicines: the patient must be kept from exposure, or to a sudden application of cold. He must be kept in a room well ventilated, and of moderate temperature, the clothing must not be too abundant, nor too scanty: during the stage of

of the fever we may allow our patient [illegible] and digestible food, such as gruels of tapioca, arrow root, toast bread and roasted oysters, [illegible] [illegible] tea or flaxseed tea or lemonade, cold water given even in moderate quantities will be injurious, finely powdered ice would be of benefit and more refreshing to the patient. There will be no necessity for depletion in the course of the fever without there is some symptoms of local congestion, or the pulse is very frequent and hard. In simple cases if the bowels are constipated some mild laxative may be employed as the Syrupus Rhei Aromaticus or Oleum Ricini or a small quantity of Magnesia, if the fever increases the following prescription may be of service.

℞.

Muriatis Ammonia	ʒiij
Pulv Ext Glycyrhiza	ʒss
Tart Antimony	gr j
Aqua Pura	℥viij

M - ft. Solutio. of which a dessert

- spoonful may be given to a child from two to three years old every three hours: the administration of Antimony and Specacuanha may suffice if the fever is high, to reduce it and it is considered a more judicious treatment than blood-letting — the refrigerant di- -aphoretics may be employed with benefit. The malignant variety is generally treated with diffusive stimulants and tonics, and if attended with severe nervous sym- -toms the administration of Camphor or Opium will be proper, the diet should be nutritious and di- -gestible, beef tea, and toast, or bread and milk &c. if local inflamation occurs small quantities of blood may be abstracted, Cups and leaches should be employed when depletion is required in children, if we cannot bleed, Counter irritants may be employed, namely Mustard, Spirits Turpentine, Ammonia: blisters aught not to be used, and if used should be used with care, for they are apt to cause difficult and foul ulceration: if the appearance of the eruption is tardy, or has retro-

-ceded we may favour its appearance again by warm bath and by mustard plasters or poultices or pediluvia. which must be watched with care, when the patient is removed from the bath it ought to be wiped dry immediately under a blanket and kept from becoming chilled. When diarrhoea occurs we may not trouble it without there is much tenesmus, with mucous or blood discharges, which may be treated with small quantity of opium and Ipecac, The numerous complications which are apt to occur during the attack of measles are to be treated by the good judgement of the practitioner, the patient should not be permitted to go out too soon after convalescence, and if weak some diffusible stimulants or tonics may be administered with benefit.

End.

In many cases the child lies constantly in an imperfect doze, with half closed eyelids, and so insensible to external impressions that the flies will frequently light upon the half closed eyelids without the patient exhibiting the least consciousness of their presence. The abdomen becomes more or less hypertrophic, the hands and feet of a leaden hue, or pallid and oedematous, the fauces becoming dry cause a sense of uneasiness which induce the patient to thrust his hand in the mouth as if to remove some offending substance.

The patient unless removed from his suffering by a judicious treatment becomes daily more and more exhausted; he rolls his head about when awake, and utters constantly short, plaintive, scarcely audible cries; he falls at length into a state of complete coma death being frequently preceded by a convulsive attack.

Not unfrequently, at a much earlier period if the disease, the brain becomes affected, and the child dies with all the symptoms of acute meningitis. The appetite is variable and often sometimes it will be wanting entirely, again, voracious, and ~~will be wanting~~ at other times the patient will crave the most unusual articles of food. When the disease has degenerated into a lingering diarrhoea it often happens that more or less appetite remains without the power of digestion, and the ingesta pass from the bowels little if at all changed. Worms either dead or alive are not unfrequently discharged by stool or even from the stomach.

Prognosis. - If the patient can be removed to a cool situation where he will enjoy the benefit of pure air soon after the disease manifests itself the prognosis is almost any [illegible]

be favorable, provided, that proper care is exercised by the mother or nurse. When the excessive and continued irritability of the stomach and bowels that we have described manifests itself, the case always becomes grave." When terminating in diarrhoea it often runs on for a long time, sometimes improving under treatment, or with the diminished temperature of the air, and then again, relapsing when the favorable circumstances change, until at length the system is worn out, or the permanent return of the cool weather turns the scale in favor of health."

Dr. Jewell considered the passage of lice worms as a very unfavourable sign. Perhaps the most alarming symptoms are those of hydrocephalus occurring at the advanced stages. A general subsidence of the morbid phenomena affords of course, grounds for a favourable prognosis; but one of the most cheering signs is a return of the

discharges to the healthy condition. Increased liveliness on the part of the child, a regular and diminished frequency of the evacuations are also favorable signs.

Morbid Anatomy. From the observations of Drs Goodlee Horner and Lindsey quoted by Woods, we give the following facts in reference to the anatomical character of this disease. In ordinary cases there is generally some indication of inflammation; the mucous membrane of the stomach and small intestines exhibiting more or less redness in points and patches, and an increased development of glandular follicles. The mucous follicles have been found in great numbers enlarged and even ulcerated both in the small and large intestines, and in one instance a small ulceration of the surface of the membrane in the jejunum. The gastric mucous membrane is sometimes so soft that it can readily be scraped off

with the finger nail. dark, livid or purple spots have been observed upon the exterior surface of the stomach and duodenum, the bowels generally contain green, yellowish or colored mucous. Retained feculent matter is sometimes found in the large intestines, and in one case pus was found in considerable quantities in the colon. The liver is usually enlarged and conjested, and the gall bladder contains a liquid which is sometimes dark green and sometimes pale or nearly colorless. The brain has also been occasionally found in a conjested state, and serous effusions in the ventricles or upon the surface, and thickening and opacity of the arachnoid tissue been observed. In several cases the bladder has been found quite empty and much contracted. When death occurs early an unusual paleness of the mucous coat, and more or less hepatic conjestion are often the only morbid appearances discoverable.

Nature.— From the symptoms of the disease heretofore enumerated and the anatomical characters given above it has been inferred that it consists essentially of an irritation or inflammation of the alimentary mucous membrane, directed especially to the mucous follicles, and associated with a congestion and torpid state of the liver, probably depending upon the same cause. The morbid phenomena connected with other organs are probably secondary or accidental.

Causes.— It is generally conceded that Cholera Infantum is produced by the combined agency of heat and atmospheric impurity acting upon the skin, and indirectly upon the mucous membrane of the digestive organs, at an age when the latter is strongly predisposed to disease from the effects of dentition. Its dependence upon a high degree of atmospheric heat is shown by the fact that its prevalence

is always in proportion to the heat of summer, the disease increasing or declining with the rise or fall of the thermometer and disappearing on the approach of cool weather. It is much more destructive to life among the children of the poorer classes inhabiting small ill ventilated houses, or situations in which much filth has accumulated, demonstrate that atmospheric impurity must act in union with a high temperature, at least to produce the disease in its more aggravated forms. among the predisposing causes may be classed dentition, premature weaning errors of diet, worms, and exposure to cold in a relaxed state of the skin. It is said that children fed by the spoon or bottle are more frequently and dangerously attacked than those which are nourished at the breast.

Treatment.— The first and most important indication in the treatment of this disease is to remove the causes upon which its existence depends. This can be done most effectually by removing the patient to a cool and healthy situation in the country, this with judicious nursing in many cases will render medical interposition unnecessary. Without this precaution the disease is liable to return as often as we succeed in arresting it temporarily, until nature, unable to withstand these repeated attacks, relinquishes the struggle for life, and the patient dies; or, more fortunately a vigorous constitution struggles with disease until cool weather arrives and the foe is compelled to retire. When removal in the country is impracticable it becomes desirable (as it is under any circumstances) to place the patient in a clean, dry, and well ventilated apartment. Removed to a less crowded part of the city has been attended with favourable

results, as I have observed in several cases. As dentition is frequently an exciting cause it will be necessary to examine the gums of the patient in the earliest stage of the disease and if they are swollen and painful scarfication should be employed without delay.

For obvious reasons the diet and dress of the patient will also require attention, the child should be kept at the breast, or, should any circumstances render this impracticable or improper, cows milk may be substituted, arrow root, Tapioca, the solution of Gum Arabic. To quiet excessive thirst small quantities of cold water may be given, but pounded ice cautiously administered is preferable. When it becomes necessary to sustain the strength of the patient in the advanced stages, chicken or mutton broth may be given, or the child may be allowed to suck a small piece of ham or dried beef, if it should be found useful upon trial, the

longings of the child may sometimes direct us to a proper article of food, but due caution must be observed in submitting ourselves to the guidance of these manifestations. The clothing should be clean, dry, and sufficiently warm, without being offensive to the child, flannel next to the skin is highly recommended. To remove sources of irritation found in the alimentary canal will be the first indication for medical treatment. Excessive vomiting may be allayed by vesicants applied to the epigastrium, with the exhibition of proper remedies internally, cataplasms of mustard and corn or rye meal, bruised mint, steep in brandy, powdered cloves, cinnamon, ginger and black pepper, mixed or singly, will answer for counter irritants. For internal remedies teaspoonful doses of lime water and fresh milk repeated every half or quarter of an hour. cold carbonic acid water, the aromatic waters and infusions paregoric, in doses of five or ten drops sufficiently diluted. Some

recommends the solution of acetate of lead in doses of one sixth of a grain repeated every hour or two. Anodyne injections have sometimes succeeded when other means had failed. They are contra indicated when symptoms of cerebral disease exist, and care must be taken not to administer them in too large doses, as they might prove fatal. When we have accomplished our intention by the administration of any of the forgoing remedies, it will be proper to evacuate the bowels and excite the liver to healthy action. For this purpose mercury in one or other of its forms seems to enjoy the highest esteem among writers and practitioners, and calomel has the preference, with many, over all the other preperations, but there is a difference of opinion as to the dose in which it should be given. Father recommends two gr for a child two years old, with the addition of a 1/16 to a 1/4 gr of Opium, repeated every three or four hours, until the stools become bilious.

He has found this treatment successful in all cases that will yield to medicine, the calomel sweeping out all irritating matter from the alimentary canal, and exciting the healthy exercise of the hepatic functions at the sametime, the opium delaying all inflammation, and acting as an anodine. It often puts an immediate end to the disease if given early.

In view of their astringent effect, and also in reference to their alterative properties, various remedies have been proposed for the advanced stage of the disease when it becomes necessary to arrest the discharge. Among these may be mentioned, the decoction of logwood and cranesbill and those of the blackberry and dewberry roots, acetate of lead, Dover's powder, alum, nitrate of silver and nitric or muriatic acid, I have considerable confidence in a domestic remedy, known as Blackberry cordial which is prepared by adding:

French Brandy (best) ℥j. ℥ss in ℥ij of powder
Nutmegg, cinnamon allspice and cloves.
loaf sugar q.s. and ℥ij of Rhenish wine.
The whole to be boiled fifteen or twenty
minutes, a teaspoonful of this given
pro re nat, will arrest the diarrhea, while
its stimulating and tonic properties will
recommend it in those cases in which
the ammoniacal preparation and vegetable
tonic are employed.
Tenderness of the abdomen may be relieved
by a few leeches followed by warm fomen-
-tations or emolient poultices, When these do
not succeed a blister may be applied.
Symptoms of encephalic inflammation call
for leeches or the lancet according to
circumstances, The warm salt or mustard
bath may be tried in this disease, and
if found beneficial, repeated daily. coldness
of the extremities may be relieved by
friction and rubefacients.

An
Inaugural Essay
on the
Theory and Practice
of
Physic,
Submitted to the Consideration
of the
Provost, Regents, and Faculty
of the
University of Maryland
For the
Degree of Doctorate,
by
Charles Mills
Baltimore

To

Prof. Reed Miller

in consideration of his eminent literary and professional qualifications, this Thesis is respectfully and affectionately dedicated

by

The Author

Nec equidem hoc studeo, bullatis ut mihi nugis
Pagina turgescat, dare pondus idonea fumo.
Ingenii laqueum: tibi nunc hortante Camœnâ
Excludenda damus præcordia: quanta quæ nostra
Pectora sit, tecum mecum, tibi, Musa, fatebor.
Ostendisse juvat: Musa, dignoscere cantus
Quid solidum capiat, et ficta tectoria linguæ.
Hic ego cerebrum animum detorsere Deorum,
Ut quantum mihi te dilexerim pectore fixi,
Voce tractam puræ: totum quæ hæc verba refingant
Quod latet, arcanum non enunciabile fibræ.

Cadiz, Feb. 4. - XX -

Ars imitatio naturæ sit, should be the golden rule to govern us in the treatment of disease. However, will be saying the Egyptians, however reasonable or unknown the causes, when our minds are approached with the idea in uncertainty, let us look to Nature to direct our judgement and dictate the administration of our remedies. Cannot we but think that those practitioners of the darker ages erred rightly, when in many instances left their patients in the hands of Providence, and free from meddlesome interference at their end. Yet it is, the liability remains that in avoiding Scylla we may run upon Charybdis, that we may inconsiderately through fear of impeding Nature's efforts, inactive prevent the results we wish. Among the Country Theories which,

like the tyrant [illegible]
sprung and matured and died in a day
that which bears the fruit [illegible]
perishable, hence [illegible]
succeed to the [illegible] practice
the tree [illegible]
ing identical. It embraces [illegible]
table hypothesis that [illegible]
concerning [illegible] philosophy
ety and stage of each disease [illegible]
such an universal [illegible]
prise us that each great man and [illegible]
philosophic is also have spent their lives
in bridling [illegible]
heard them [illegible]
into the [illegible]
These have been succeeded in turn by others
who perhaps [illegible]
them, gain [illegible]
mining [illegible], then sunk under the
disease they had [illegible]

in their ability to cure, it furnishes
stands the highly thought that our ideas
are barren, [illegible] as the new-born babe, pro-
vided the patient shall have previously
justified himself by a crossing of the
Tincture [illegible] [illegible]
degrees more or [illegible] [illegible] them,
and desirous of [illegible] [illegible]
of the people to confidence equal to the
ones, too late to discover his error and
the [illegible] horrors of hydrophobia.
That men should have become [illegible]
drawn [illegible] [illegible] from [illegible]
propositions, [illegible] [illegible]
we consider [illegible] [illegible]
ignorance and superstition [illegible] the
light of truth had [illegible] [illegible]
heavens [illegible] the [illegible]
amount to the ridiculed [illegible]
originating among the [illegible]
tive the minds of [illegible]

They could discover no natural relation of cause and effect between the application of a bandage of rotten [illegible] to the sick that healed the wound and the speedy restoration of the patient to perfect health, some [illegible] to account for the results quite different thing: Repeated rebuke, the fact established the law and philosophers were content to return from the pursuit of theories, which like vapour hill with which continually led them through the mazes of doubt into the gulf of disgustation, and return, each [illegible] of one of their own facts.

Other quick habit narrow conclusions causes.

At other times we find them tearing aside the gloomy veil that overshadowed their understanding, leaving both with a most equal clearness [illegible] these glimpses were of [illegible]

ration, too tender to offend or mortify
to themselves, yet [illegible] to the
organs of [illegible] sensibility
[illegible], who can hearing mention of the
great numbers [illegible] for sing or in
tion for their wasted [illegible] of
defaligable devotion to [illegible]
profession, this unremitting labor
in the relief of human misery, [illegible]
[illegible] of their [illegible]
to undiscovered truth, that [illegible]
fill and write respect to [illegible]
just as they found her, [illegible]
perfect [illegible] as [illegible]
just as her dictates, [illegible]
with the designs [illegible]
[illegible] the suggestion of an [illegible]
man of the [illegible] century. — Had the
Calf of the leg been provided with a
prominence placed behind instead of
being preposterously and proportionally

placed before it, it would have been a very
better foundation for the [illegible] which
could not then have been raised by the
scientific research of the Hebrew upon
interest in the Student to depend for the
credit. If an indulged in upon known
data, there may be a certain right
to the practical result, but if the inferences
be drawn from mathematical analysis
lead to a wrong understanding of Postes
the figures he was dealing with the
[illegible] of natural existence
when he wrote Cogito ergo sum.
The reference of the prophetic Cycle
only be literally true, and yet the
Cipher had invented all things in the
dates as the material and in the
results of the first principle of his
book. Cicero has laged down a rule
which it appears observed, [illegible]
and [illegible] [illegible]

in practice — [illegible]
spirit and [illegible] a [illegible]
result of [illegible] [illegible]
reason [illegible] [illegible] the [illegible]
those [illegible] [illegible]
who [illegible] [illegible] [illegible]
yet attained the [illegible] [illegible] [illegible]
who, as it [illegible] [illegible] [illegible]
this object were [illegible] [illegible]
difficulties to [illegible] [illegible]
established, [illegible] [illegible] the [illegible]
of new theories [illegible] satisfactory
than those which [illegible] [illegible]
to fill. [illegible] [illegible]
incalculable [illegible] to [illegible]
by [illegible] [illegible] the [illegible]
of [illegible], had to [illegible] [illegible]
[illegible] without his [illegible] [illegible]
been considered [illegible] [illegible]
[illegible] [illegible] [illegible]
dark a state [illegible] [illegible]

of his greatest [illegible]
he all the credit [illegible]
popular but [illegible]
teaching the people [illegible]
gentleman [illegible]
the illustration [illegible]
first began to see [illegible]
vision failed, [illegible]
would contend [illegible]
al fact [illegible]
of many minds that [illegible]
cause to [illegible]
Volume has made most obvious [illegible]
further observations [illegible]
of all men are [illegible]
to consider that [illegible]
in the vast [illegible]
moral philosophers [illegible]
their eternal reproach, they relinquish
the principles of [illegible]
to become immersed in the mire of

Metaphysical Confusion. Fortunately for the Science of Medicine, and the well-being of Society, many have its pale under the inspection, the sciences afford them better opportunities for the display of intellectual investigation. This probably was the case with Stahl, who, we he left behind a Rattle, that the ultimate, what would have been the fate of his inclination had he deemed it best to stay. That if we know the ultimate particles and the specific arrangement of these particles in matter, we might easily determine if the bark, purges or mercury salivates, is a happy thought and capable of practical improvement, but that by that he is so could have saved the trouble. Had the great battery of "Qute Esse" developed itself in Physic, other

Metaphysic and tangles fancies confine themselves to speculation and let alone the matter of proof and computation, and which in their nature are incompatible with practical application, let them pass safe from censure. But when, forgetful of the great end to which they as physicians have been called to subserve, regardless of mediate or immediate danger, they follow the idle phantasies of a disordered brain to a positive conclusion, let them receive from their merit the reproaches of mankind and will hasten the time to be regarded as the lineal heirs of injudicious practice. His indeed the separating and arranging the individual elements entire disease, perhaps leading the practitioner to an insight into its nature, thus preparing him better to cope with its effects, nothing can

but these cases are in an investigation* than just to point well our principles, and in relation to the indications we may draw from them, as to the elementary principles upon which we desire them to be established. If bitter fountains cannot send forth sweet waters, if the premises be sound, the conclusions must be indisputable facts. I now pass to return for a moment to that great man, and first in the history of the Hospital. He considered affections in pulmonary disease very rare. The pathological lesions in the lungs resulting from the tuberculous softening and ulceration and partial adhesions are continued to be evidence shown after death, to all

he considered the results of the various
morbific causes which were every
day being poured on the internal
surface of the body. Basing his
upon these principles, his first endeavor
was to subdue the inflammation,
to subvert the basis of the disease,
and this must precede all else.
The fallacy in which he had become involved
by these confounding conditions
similar only in name, did not appear,
but the clinical report bore
ample testimony to the severity of
the error. This result of mistaking
the shadow for the substance, of considering
the name instead of the thing
signified, has been recognized in other
sciences than that of Medicine.
Upon the basis of subtlety, Duns Scotus
did Human Conquer this "Prince of
Human Nature," under

[illegible]

similar circumstances — nothing
the intention — was [illegible]
theory first [illegible]. In the eager
of establishing one general principle
of practice, one can hardly dissociate
the mind is fixed by the
one omnipresent idea to the exclusion of all the rest. Necessarily
distinctive features of a disease, if opposition he pay no attention to, due to
convince himself his preconceived
impression was correct. If opportunity
he at one time cured by active de-
pletion, leeches, under the same will not
bleeding and purgation he at all times
attended with the same happy results.
Is not this as fine a case of the disease
the other, why then shall I not
the same treatment in [illegible] action when exposing [illegible]
duced. Why may I not [illegible]

to this established rule and bleed [illegible]
[illegible] pulse gives evidence to the
exalted action of the heart, to have time
plea [illegible] with [illegible]
symptoms unequivocally testify
the excitation of the vital powers, [illegible]
know nothing about it, the [illegible]
lips and eyelids may well remember
thing, but these signs are far [illegible]
satisfactory than the bellows-
murmur of the heart. Thus may we [illegible]
some time to talk, but [illegible]
actions speak strongly [illegible]
not to [illegible]. Females diseased [illegible]
gradually their whole [illegible] [illegible]
prized, within the limits of [illegible]
and warm water, they have [illegible]
recipe for all diseases —
Bled, blister, purge — [illegible]
Under the opprobrious non-[illegible] metallic

philosophers divide the Practice of Medicine into Rational and Empirical. The division is a good one, inasmuch as it allows us to expect too much from the first and too little from the second. Practitioners have sought to flatter themselves by assuming a knowledge of certain morbid conditions and indications, when in the majority of cases nothing is more obvious than our ignorance of such conditions. Practitioners shall assume all practice to be for the most part conducted upon empirical principles, and to have originated in empiricism, I crave to notice this branch first, leaving the little I have to say about the other in contra to fall in the conclusion. Celsus speaks of a class of men "qui se ipsos principes ac experimentis tantum innitantur" and hence is responsible for the origin of the term. Should we undertake this

signification. The opinion of many wise men
that the use of Tobacco is not
variable in Medicine, and therefore it is
worthy to be called a sin. Moreover
because we will apply the true Christian Conclu-
sion, humiliation will in time pride
self-love, that still practice is better
of experiment and to be taught of
Christ. This Conclusion magnifies
English writers have proceeded, and our
they construed to practice bodies,
nor in the present state often treated of
Can be, more successful than ill-
directed Empiricism. Let us in the
who would not presume Eminent to
contra-indicated, in the most serious
exacerbations of Pleurisy or Pneumonia
Fever? and yet nothing is more certain
than from the beginning of my in-
telligence, [illegible]
more than [illegible] Wherein

practice versus vaccination, and [illegible] practice, undoubtedly the result of experiment, in by far the majority of cases successful. Instances of a great sufficiency may be adduced, which do not in any degree [illegible] external [illegible] presumed [illegible] administration of Quinine for [illegible] the virtues in Intermittents. Not [illegible] or experimental evidence, the fact, the Cinchona tree might till this day continue to flourish, and die, in the Province of Loja, without having the [illegible] which the Person respecting [illegible] Providence had unfolded in its trunk. Who could take the simplest Opinion in the Cabrone land determining from any adventitious properties that it would be in a given case of disease, of two such [illegible] from the same Cinchona? Can even Tinctures be [illegible] Quinine than the Sulphate of Quinine

The sulphate of lime, yet the stand side by side in the strength and beauty of [illegible] seems there to have descended from generation to generation, the vast chain developing its effects that it emerged from the obscurity of the past into the brightness of the present. Human Nature was destined to be what through the wide world continual evidences of the curse of God's broken law, but the silent voice of Prophecy dares to whisper "Man may get the free" — It would seem then that as the ultimate elements of composition and the relations they occupy are unknown, (without a rich knowledge we dare not, to point from experience, that we concerning their action in any given disease) so in respect to that disease we are equally at a loss to determine what action contrary agents shall exert, in the majority of the laws which govern them are concealed from our view. It is in

fathom the great secret of life, to trace
trace the hidden springs of death! He has hid
governs both time beyond our comprehension,
the mind of man cannot attain unto them.
A certain undeviable chain of operation
determined in indivisible existence, a
cessation of these operations constitutes
death. As we are ignorant in the
case of the ultimate principles which
declare to us the condition we denominate life,
so in the latter case we are
equally ignorant whether it is a sus-
pension of these principles, or the
annihilation, or the substitution of
others in their stead, which declares
us that further and opposite condition
which we denominate death. The
facts alone are evident; we recognise
our fellow-men as being like unto us
endued with vital action, but we do not
know to influence these actions, the

ing, intelligent, living being, and is able to see all things and that that is good like and action cease, — the man is dead! "When a man dieth, shall he live?" If then we are completely ignorant of what may be found in the prospect of those influences we see exerted in and around us, we are in the same determination about them. Still it is at the same time acknowledged that, what we term rational practice is little else but modification dictated by the occurrence of certain probable or presumed facts, and these hitherto determined by experience. What did you know but mead? Hippocrates, Celsus, Galen and the score of other writers who were medical precedent, bring, collate, test, establish and under their observation, observe the agreement or disagreement with facts, and then discard what is not experimentally rediscovered, unfounded or inapplicable

and finally he mistook what is in itself true and well-observed. Against every medicine practitioner the same thing I can urge, whatever rational principle these practitioners profess, if he finds it ill-suited to the cases falling under his care, he will discard it and turn to that by the adoption of which he has been most successful though conducted without one particle of reason. But a single fact commands our attention, that the diseases against which our treatment is most unsuccessfully directed are those we best understand. The accomplished Louis might with unswerving certainty tell the histories of the lung in the manifold changes of phthisis, but even he would be free to confess that so far as curative means were concerned that knowledge availed him nothing. The same remark holds good with respect to enteric or typhoid fever, where the microscope on the one hand and the tedious labors of the nature-

just on the other hand would be to the end
the prima materia of the elixir, or the
the question resolved, [illegible] in the progress
towards perfection, it had given rise to discovery
after discovery, revealing at last the true, and
enlightening the world, the ultimate
operations of extended laws were made known,
and mankind shall at last be established, at
into the Northern, the Mediterranean, the Atlantic, Pacific,
Indian, and Chinese Nations, in
their respective affording of friends
to their fellow men! [illegible] vision! may
it speedily be hastened. The principal
practical have seen to be the results of
Experience. Nature, on the contrary,
is where we remain, or think we do, to the
conversion between the means employed and
the ends to be accomplished. It has been
example of the first division, the action of
astringents, or acids, of cathartics, neu-
under the head. It may be well to trace

of this distinction altogether, and act in a manner in practice as, without having an inquiry to establish a principle, under cover of the doctrine of many natural indications & relations. The practice of physic has not yet attained the dignity of a science, the laws which govern us are too remote, the influence of vital actions too concealed, pathology not little understood, to enable us to develope the mysteries of existence and act unmistakably in the treatment of disease. But though the light afforded be feeble, it is in many instances sufficiently strong to point out the way and not should prevent bitter errors. Hence it appears to me the Student has should first confine his attention to the study of general Principles. Set him against himself with the great engines of immediate against the Human Family, let him fully understand the general laws of their operations, and he will see hypothesis of minor importance with alarm and at it

Sensorial in a few words, we must begin with particulars and ascend by degrees to the study of Mathematics are reasonable, but in Medicine where so little is understood and so much to be taken for granted, we will find it to be convenience and advantage to transpose more and individualize by to descend from generals to particulars. Let him understand there is one great condition the omitted. Fever, divide this into accidental and specific, subdivide these again according to their grades, into sthenic and asthenic, and then he may in studying their varieties better comprehend that being essentially distinct in of consequence demand essentially different plans of treatment. In that treatment let him remember all medicaments are not not contained within his Pharmacopia, that drugs should always be disguised with as soon as practicable, and the patient be

permitted to re-establish his wasting health and strength by breathing the pure air, and basking in the true light of Heaven, and by availing himself of all other means God and Nature have so abundantly supplied. By thus on many occasions waiving the sick man's fee to seek his own cure, he will acquit his conscience at the expense to his pocket & reputation. And in the administration of remedies we cannot be too cautious in bringing to mind

Modus tollendi est venenum facit medicamentum, ex medicamento venenum.

That those things which are most injurious, may be proper management be used with infinite advantage, while, on the other hand, nothing can be so totally innocent, but it may be attended with disastrous consequences by improper or unskilful use. For example, how frequently do we see patients

arising from Continued Fever, when every thing seems to promise a speedy restoration to perfect health, suddenly relapsing into a fatal Condition merely by partaking of one intemperate meal, although the diet away have been simple, and in proper quantities would certainly have proved beneficial; Motion and rest, secretions and excretions, age, condition, sex, habits, and the thousand other elements of a heterogeneous Catalogue, are all to be carefully considered, and while the one class will at times afford us material aid in the Diagnosis of Disease, the other will prove little or no less efficient assistance in its treatment. The imagination is powerful for good as well as evil, and it is probable when the physician has once gained the confidence of his patient, he lacks little of the cure when he can thoroughly influence his imagination, attributable to this doubtless is the ex-

ceb of Homœopathic medicine and cure
there is no harm in prescribing medicines of the
means when it is done, for the most trivial
of objects. A circumstance which occurred
years back in this state in the practice of a
somewhat eccentric physician, will serve
to show the amiableness of this quali-
in a fortunate light. A man who had been
slightly sick of an intermittent, after he
was totally recovered from the disease remai-
ed in such a hypochondriacal state that
all efforts on the part of his physicians to
induce him to leave his bed were unva-
ailing. Finally he hit upon the following ex-
pedient. Opening to see him one morning,
as he neared the bed in consternation
became filled with terror at finding him
with great caution to its new side mustaches
and in a low voice, but with exceedingly
earnestness says — "My friend in project
quiet, your life depends on your being not

the least noise, for instead of an hearty
large rattle-snake I was told, he was
the man was out of bed scrambling down
down as fast as his legs could carry him,
not he was after heard to complain of the
blues. Cicero (if the authority be not con-
sidered heterodox) lays down certain rules
to be observed for the comfort of our pa-
tients. Cuit igitur in consolatione primum
medicina adhibenda est mollium sublevatio
offensionum, deinde demonstratio! altera, et ea
communis conditionem vitae, et proprie
si quid sit de ipsius qui mortuus est ignorandum!
tertia, si omnino ejus detrimentum
frustra ferebat moerore, cum in-
telligas nihil ne lacrimis, cum in-
urged Cicero was no Doctor in the me-
dical sense of the term, but I
I doubt not he should find his advice
good and adequate to the end with.
It is unnecessary to dwell upon instances

enumeration of the conditions in which every practitioner may be called upon to act or suffer in office is so long, so innumerable and so new and unlooked for are he best calculated to elevate him in the scale of public opinion, or to fill him with honour and distinction. By careful study and habits of mature meditation he should continually prepare himself to act upon the world with increased efficiency. Nor could any advice be better suited to his condition than to make his own brain the constant vade mecum of all he needs and does.

I have at length arrived at the end of my essay, intended, I believe, as a recommendation of its author to the elevated and responsible position of Doctor of Medicine. I am full and strong in consciousness of its imperfections, there is a

are attributable to the fundamental nature of the subject I have undertaken to treat, and to the limited knowledge that I possess of those matters least known, and hardest to the mastery of the subject, some of the elementary principles of which I have endeavored to explain in these pages. Conscious as I am that many important principles have been omitted, and those mentioned only superficially glanced at, I have the satisfaction of knowing that no one has an objection to their study and representation. While I leave the halls of this University unbiased by any theory which can antagonize a rational practice, I must strive ever to improve upon the teaching there received and the doctrines there inculcated, and whilst I remain in the ranks of that profession of which I hope soon to be a member, to act with a mind unclouded and a judgement uninvented by licentious or unwarrantable hypotheses.

An
Inaugural Dissertation,
On
Death

Submitted to the Examination
of the
Provost, Regents, and Faculty
of Physic

of the
University of Maryland,

for the
Degree of Doctor of Medicine,
by
Augustin T. Sappington,
of
Maryland.

I shall not attempt to write an elaborate discourse, as I am conscious of my inability to do justice to the deeply interesting subject I have chosen for my theme; yet throwing myself on your indulgence I will venture to present some thoughts concerning death - not in a moral, or religious view - but merely as a fact in Physic, or the act of separation between the soul and body. No sooner is the babe ushered from its mother's womb, than it is surrounded by dangers, and diseases, which threaten to tear asunder the bond, which connects the immaterial principle with our material body; and

when we reflect on the perils to which life is constantly subject, we should not wonder that so few survive until their heads become white with the frost of many winters, their limbs feeble, and their gait tottering beneath the load of years; presenting a picture worthy of the respect and homage of the young.

Nor is it only the feeble and sickly, who are prematurely conquered by death; for in looking around we see the strong and robust man stricken down by our common foe, as well as the pale, and delicate female, whose emaciated form, and perished cheeks afford

an unerring index to the diagnosis of her disease. Though it has been ordained by divine Providence, that all men must die, we are taught by the side of the bed of death, that all do not die alike.

Some are cut off suddenly in the prime of life, as a tender bud nipped by an autumnal blast; others lie on the bed of death for months, sometimes better, and again worse; while another sinks gradually, like the last glimmerings of day, and we are scarcely able to tell the precise time of his dissolution.

Again one man possesses his intellect till the vital

spark is extinguished; while in another case reason is driven from its throne, and wild delirium, or perfect coma takes possession of its seat.

There is also a great-difference in the appearance of persons at the hour of death; in some cases the spirit calmly, and quietly takes its leave, and soars to its Creator; and the countenance of the dead looks so calm, and composed, that one can hardly believe that all, that gave it life and animation, and to the person hopes, and desires that untimely death left unrealized, had been recalled by its Maker: while in others there is a

terrible conflict between the recuperative power of nature and the depressing influence of the disease, which renders it unpleasant to behold the last struggle of the dying, and which causes the coun-tenance to assume a distorted appearance after death. Death as it takes place in disease is nearly always complicated; the nerves become weakened, the strength fails, the digestive organs are disordered, the blood im-poverished, the mind loses its normal activity; and gradually the whole sys-tem is deranged by differ-ent causes operating injur-

-viously at the same time. Occasionally, however, a predominant derangement, may be traced, of one of the three vital organs, the heart, lungs, and brain, and a tendency is clearly manifest to one or other of the ways of dying, which I am about to speak. That life may be preserved arterial blood must be distributed through the system, and in order to accomplish this, the heart, the great reservoir of the circulating system, must be in a sufficiently healthy condition to propel the blood forward, and there must be a sufficient quantity

of it sent to its chambers to cause their contraction.

From what has been said we see clearly that there are two ways, in which death may begin at the heart.

The first mode, denominated death by asthenia, occurs not because there is a diminished amount of the proper stimulus to the heart's action, but is owing to a want of contractile power in the heart.

This may be proven by examining the heart after death; in which case we will find there an amount of blood that would have

been adequate to have continued life, had not that organ been paralyzed.

This manner of dying is caused speedily by certain poisons; and occurs in acute peritonitis, also in cases of malignant cholera, & follows extensive mortification; it is sometimes caused by intense, and sudden grief or joy.

The phenomena presenting themselves when death occurs in the way of asthenia:- are a frequent, and feeble pulse, great debility of the muscles; the mind is unaffected, and the hearing may be painfully acute.

The second way, called very properly, death by Anaemia, is caused by there not being a due amount of blood sent to the chambers of the heart to make them contract. This mode of dying follows excessive hemmorrhages, and flooding in women after child-birth.

The symptoms present:- are paleness of the countenance, lips, and mucous membrane lining the eyelids, sight diminished; pulse weak, slow, and irregular. The mind is dull, and cloudy making the contrast very apparent between this and the mode

just described.
Somewhat similar to the two above described, is that caused by lingering, and exhausting disorders; as chronic dysentery, phthisis, and sight hemmorhages often occurring: but the best type of these mixed ways of dying is seen in death by starvation. The blood receiving no fresh supply from without is fed by absorption from within, and gradually the heart is being deprived of its contractile power, and at the same time the blood is stripped of its nutritious particles. Death beginning at the lungs

which is styled Asphyxia, is not uncommon. In some cases it takes place sudden-ly, while in others it ad-vances more slowly, and progresses less rapidly. Life is speedily extinguished by preventing the entrance of fresh air into the lungs and thereby preventing the oxygenation of the blood; as, by the closure of the glottis; submersion of the mouth, & nostrils into water; by brea-thing air that is deprived of oxygen; by force applied to the chest, and abdomen, which robs the inspiratory muscles of their power to expand the lungs. This in-

-ability to expand the chest is sometimes caused by strychnine; and is occasionally produced by tetanus, and is brought about by the entrance of air to the surface of the lungs through a wound.

The symptoms are vain but frequent efforts to respire; the mouth, and nostrils are widely distended; there is a determination of blood to the head; and finally vertigo, & insensibility. Death, slowly destroying the patient, is produced by croup, which causes false membranes to form in the larynx and bronchi; by disease situated in the lungs themselves, which

prevents a sufficient quantity of air to enter them; as in pneumonia; by effusion of serum into the pleurae; as in hydrothorax.

The phenomena, accompanying this mode of dying, are - a difficulty in breathing; the respirations are short, and more frequent; the pulse weak and irregular; and insensibility closes the scene.

I have yet to speak of death commencing at the head, which is called death by Coma.

Life is extinguished in this manner by effusion of blood into the brain; as in apoplexy, of serum into the arachnoid membrane of the brain; as in hydrocephalus; ~~and~~ or of

~~[illegible]~~ into the ventricles of the brain; as in Bright's disease. Compression, and concussion of the contents of the cranium terminate fatally in this manner; and occasionally an attack of gastritis ends unfavourably, in the way of coma, on account of a metas-tasis to the brain.

The symptoms present are headache, drowsiness, delirium, insensibility, and finally death.

Knowing, then, there are various modes of dying, it becomes the duty of the physician to learn to which form the disease has a tendency; and by counter-acting it, he may preserve

the lives of many of his fellow beings, who by their industry, and perseverance may become ornaments of their country, and the comfort of their aged parents.

Augustin B. Sappington
of
Maryland.

An Inaugural Essay

On

Diagnosis,

Submitted to the examination
of the

Provost, Regents,
and

Faculty of Medicine,
of the
University of Maryland.
For the degree of
Doctor of Medicine, &c.

By
[illegible]

The science of medicine is one of its efforts to at least with great interest to the physician; than that which is now [illegible]. [illegible] discriminating diseases and recognizing [illegible] objection its true nature, discovered [illegible] of all entanglement leading [illegible] whatever, to impede its discovery, it presents at once with a — a sense of the vast importance of diagnosis, and of the numerous difficulties to be encountered in its formation — When we enter into a vast variety of classifications diseases have been ranked, the vast number included within the range of each subdivision, and the complexity which not unfrequently attends individual cases, the utility of diagnosis becomes apparent, and the extensive field for its action obvious. Although at times cases are met with, that baffle the searching efforts of the most skillful, the great number [illegible]

within the bounds of exploration, and the [illegible] with which they are [illegible] made [illegible] to [illegible] [illegible] of discrimination. It is [illegible] [illegible] with the normal or healthy state of organism and bringing to our aid the [illegible] devised for the detection of any departure from health, we are enabled to come to ready conclusions and that too, under unfavorable circumstances. The senses are the great medium through which we are to derive the greatest amount of [illegible] information, and as to the degree of discipline to which they have been subjected in the recognition of [illegible] phenomena, so are our decisions rendered with more or less certainty. To give great exactness to the investigations made by the senses, certain means are employed with which it is of much importance that we be acquainted. These are pressure, palpation, auscultation, measurement, percussion;

[illegible] ation, and [illegible] employed [illegible]
[illegible] aspects, as [illegible] [illegible] and
[illegible] ical reagents. The first of these, pressure, though perhaps one among the most simple modes employed in [illegible] produce important results and its use shows [illegible] carefully studied. As in case where we wish to learn the condition of an organ respecting its degree of firmness or yielding [illegible], the elasticity of its walls, the presence of tumor or abscess, pressure offers most [illegible] results. And in many cases [illegible] gives clue to the character of an internal [illegible] by detecting the [illegible] of the viscus pressed upon; it is also instrumental in detecting certain [illegible] upon the surface and gives to one skilled [illegible] great significance in distinguishing [illegible] appearances [illegible] to accompanies [illegible] pressing to the hands or the fingers of each other. We have examined and [illegible] the one

and depending on the estimate. Palpation consists not of a [illegible] of the part than pressing upon it, and the two terms should in no wise be confounded. In the practice of this mode it is of some importance that certain precautions be taken. The muscles over which it is to be made, should be as much relaxed as possible and the position of the patient varied. By repeating this manipulation periodically, the change wrought in the different diseased viscera as to their amount of induration softening and enlargement, becomes perceptible and the effect of time and remedies in supplanting the disease action is plainly shown. Touch, a species of palpation, is particularly indicated in the examination of parts hidden from view, as it is necessary their condition be known, as in vaginal and rectal examinations for ascertaining the existence of tumors within the pelvis and calculi in the bladder, [illegible]

is employed where we wish to learn that lung are present both fluid and gas in one and the same cavity, its use is therefore of limited extent, only indicated when the condition above is suspected. It is to be effected by giving to the patient bed a gentle motion forward and backward and suddenly ceasing. If there is within the cavity fluid and gas, an audible flap will be produced known to be heard as a gurgling sound. By mensuration is meant that process, which enables us to determine with greater accuracy than is discoverable with the eye, the relative increase or diminution in bulk or length of any portion of the body, and is advantageously employed to detect the extent to which dropsical effusions have been poured out, and the degree of absorption taking place. Percussion the next mode of Exploration that requires attention, found our most reliable means in discovering the relative differences in degree of resonance

in exciting in the sense of cavities, and in detecting lesions, caused by disease or being naturally present, in viscera of opposite sides. It seems to have been very early applied to the examination of morbid states, but principally confined to the abdominal cavity, its use thereafter was carried to but limited extent, in considering the non-universal applicability of this test in discerning morbid changes, especially those of the thorax. It should be borne in mind that in practicing percussion over the vital of persons, a marked difference may be expected in resonance, according as it happens to be a patient of very broad shoulders of well developed muscles, or one of slender frame and whose chest is not covered by such voluminous muscles; for the former there would more likely be produced a deep, dull sound over its walls, while that of the latter give a more resonant or tympanitic ~~condition~~ condition of its parietes.

Pleura. We should recollect that regions of the body differ very much relative, in their amount of resonance, thus we find in making percussion over the thorax, that above the clavicle, in the axillary and lateral regions, a clearer sound is heard than over the praecordial and scapular regions. Two modes are given us in which percussion is performed, immediate and mediate, the first is accomplished by striking directly upon the exposed surface with the fingers; the last mode, mediate, is practiced indirectly, through the interposition of some elastic substance, styled plessimeter. For this purpose various articles have been invented, such as strips of ivory, caoutchouc, and pieces of silver coin &c. But the best and most convenient plessimeter, under most circumstances, a few rare instances alone excepted, is the index or middle finger of the disengaged hand. Since it yields the most natural

sounds, and does not distract the attention of the percussor, by directing him to its proper adjustment, which would necessarily be required in the use of an instrument. In applying either of the above methods we should observe certain rules, in order to derive that benefit which percussion is capable of giving, remembering that it is not from the sound produced on the side of the diseased organ, that our information is to be gained but from the peculiarities of this as compared with that emitted by the opposite healthy fellow. In the first place it becomes necessary that we acquaint ourselves with the natural resonance of the part to be percussed, by commencing at a point remote from the seat of disease and then comparing the two sounds. The surface of the patient if not exposed, should be covered only by a linen garment, so that the sound may be as little interrupted as possible. When percus-

ping the thorax, it is desirable for the patient to assume a sitting posture, with the arms down by his side, with his feet and back part of which is being tested, and the hands brought over the head and clasped when exploring the lateral regions. And when the abdomen is to be percussed the dorsal decubitus is preferable. It is to be effected by striking with the right hand upon the index finger of the left, moving in direction from above downwards, both anteriorly and laterally. This resembles that previously spoken of, it also subjected to variation in degree of resonance according as it is the stomach, large intestine or small, we are examining, and as to the amount of distention by gaseous fluid present. When it is necessary from the presence of much adipose tissue and voluminous muscles, to exert a considerable degree of force in percussing, we should begin, by striking gently, and increasing this to the amount—

requisite, in this way we prevent inflicting pain upon our patient, which would likely be severe, from the application of much force suddenly. Percussion when aided by auscultation in noting its effects, forms our chief means in diagnosing thoracic affections, and such exactness is given to our decisions, at times, as amounting to positive certainty. The two conjoined, are of incalculable value, and should invariably accompany each other. Auscultation consists in the application of the ear to certain parts, for the purpose of hearing the sounds produced, and comparing the healthy or natural, with the altered or those that have undergone change. It is also practiced immediately or mediately, the same distinction being made between these terms as was in percussion. Immediate Auscultation is the act of bringing the ear into direct contact with the surface or that thing covered. Mediate has reference to the intervention of an instrument, called the Stethoscope.

The first of these modes for ordinary occasions suffices, and should be used in all cases, except from the existence of some bodily impediment its use is contraindicated. As in extremely emaciated persons, where the clavicle and acromion are remarkably prominent preventing contact with the ear, or where there is a great deformity of the thoracic walls presenting an uneven surface, or in edematous subjects, when it is desirable to displace a portion of the fluid and circumscribe a limited space, and in examining the mammary region of females. under such circumstances, the Stethoscope should be resorted to. Many of the precautions previously mentioned in the performance of other modes of exploration are also to be observed in this. The quietude of the apartment; position of the patient; the state of the muscles, and every thing likely to modify the character of sound are to be attended to. Then to get an adequate notion of the changes wrought,

respiration should be heard as occurring in a state of health, this being known we can then readily appreciate any deviation in strength or weak ness of the respiratory murmur, as compared with the natural standard; and by making patient take deep inspiration and long expiration, and requiring him to speak aloud or cough, we are enabled to comprehend the various modifications effected in sounds and those too, with great precision - Among the remaining Exploratory means at command, may be mentioned, that by sound, especially, whose value in ascertaining the existence of calculi in the bladder, and exploring fistulous orifices, merits particularly the surgeon's attention.

The advantages of the speculum in viewing the conditions of cavities inappreciable by unaided senses, as in the colon, vagina & uterine examination, are well known -

The employment of the microscope, magnifying glasses, and chemical tests though yet, taken simply and separately, is considered of

lit- importance to other that have been
named; yet we should remember, that no
one of the foregoing methods of exploration
is capable of giving perfectly satisfactory
results through, and by means of itself alone.
But there is rather a dependance of the
one upon the other, and whatever light is
incapable of being given from one some
may be expected from other, and thus
agents adding to the mass of information
obtained from the practice of the other, and
that which is procured through the in-
strumentality, not unfrequently lead to
the discovery of abnormal changes, and
must in every instance where their use
is indicated be our surest guide in
the discovery of disease. Among the
diversity of symptoms, manifested by the va-
rious derangements to which the system is
liable, are certain signs said to be diagnos-
tic in their character and should be carefully
studied by the physician. Some of these

however are more valuable than others, those styled characteristic or pathognomonic, from the fact of having been observed always to accompany certain condition, should therefore have greater weight attached to them. There are also negative and positive signs which should be taken into account when diagnosing - but we are to be governed more by the symptoms present, than those which are absent. When making an examination or interrogating a patient, it should be done systematically; for by so doing much time is gained, and where order is observed conclusions are more promptly, as well as more satisfactorily made. For it is obvious that much inconvenience and embarrassment would frequently arise in a hetter-skelter mode of procedure. And not only would the physician at times find himself dealing in minutiae, but would be more liable to neglect other points, perhaps of decisive interest. Whenever a patient is seen

for the first time, a general and rapid inspection should be given his exterior, for by this means, the character of the affection may be determined at once, without afflicting the patient, by asking unnecessary and unimportant questions. And even though we may not be able to form our opinion immediately by inspection, yet this peculiar tact in being able to judge from the exterior, the mischief that is going on within the system, greatly aids in approaching it sooner, and by giving attention to the peculiar gait, attitude and expression of the patient, such truths are obtained which could scarcely have been received but by the practiced eye and tutored intellect. When putting his questions the physician should be careful that he is well understood by the patient, and should there be doubt resting upon his mind respecting it he should reiterate them again - expressed in different words -

And if the patient is one of intelligence and capable of describing his symptoms, he should be permitted to do so without interruption. It may then be proper for the physician to further his investigations by inquiry into the patient's previous health, whether or not he had been suffering from any recent sickness, if so its nature, what treatment he received. The age, occupation and habits of life should next be known. The patient should then be strictly interrogated as to the time when he first received any warning of his approaching malady - and if a laboring man when was he first obliged to desist from work. By learning such facts, the physician is enabled to judge of the manner of attack, whether acute or chronic in form, the predisposing or exciting causes. Sometimes when such information can not be gotten from patient himself, owing to the virulence of the disease with which

he may be affected or from any other cause, then it may often be received with advantage secondarily, from his prior or in attendance. But when it does so it is always advisable for the physician to see and observe for himself and to hear from the patient a statement of facts respecting his own case. The attention is then to be directed to the existing symptoms and if pain be present it is not merely enough to know that it does exist and in a certain region, but the patient should be required to point out its exact locality and follow its course with his hand. The peculiarity in the character of the pain should be known, whether paroxysmal or constant; periodical or transient, deep seated or superficial; the modifying effect produced by pressure in increase or diminution in its intensity, is also to be observed. It then becomes necessary for the physician to examine the part affected by aid of sight and

touch, through which he is permitted to notice any marked departure from the healthy consistence and natural firmness of the organ as well as any alteration in shape or length, it may have undergone. By percussion he ascertains the degree of elasticity or resonance of its walls. — According as it is one or the other of the three great splanchnic cavities that we have to explore, so is the facility or difficulty increased in its examination. Thus the cranium enveloped completely by bony walls, may be expected to offer greater difficulty in the exploration of its contents, than the thorax which has for the construction of its parietes both osseous and soft parts, while the abdominal cavity, from the volume of its investing membranes, composed in front of fleshy tissue and behind supported by the vertebral column, would be imposed from the ease with which exploration can be applied, to offer few

then it is to be found — but the difficulty is greatly increased by the fact of visceral present and a similitude in the action of the different function of said — The physician then pays particular attention to the various organs suffering derangement in the manner directed — and by making use of the means he has within his reach — Since most of the cases, that are to be recognized are attended by variety of symptoms and liable to complication, it is indispensable for the practitioner in forming his diagnosis, to be governed by such conditions as constitute the most important elements — These may be enumerated as the seat of the local disorder, the intensity and extent of invasion — Secondly the attention of the physician should be directed to the sympathetic phenomena, both local and general — the energy of febrile reaction, the period to which the dis-

case, has a bearing on its type and be-
haviour, whether chronic or acute.
When therefore endeavouring to state since
the seat of disease, we should in the first
place try to find out the organ that
has undergone change. This can in
many cases be done, where the disease
is situated on the surface, through the
medium of the senses solely. And again
even though the affection be internal
and out of the immediate perception of
the senses, yet by touch and a close ob-
servation of such phenomena as invari-
ably follow peculiar states, and the
anatomical lesions revealed by necro-
scopy, we can generally hazard an
opinion with comparative safety and
assurance. But there are other de-
rangements, concerning which, dissection
fails to account for the symptoms mo-
lested before death. In such cases
Physiology furnishes the only ground for

which any decision can be based, it informs us of the functions belonging to each organ, so that if ever such functions are seen impaired, the organ used has to be regarded to. As in case of certain nervous derangements, the brain & nerves being organs of sensibility, and when we have pain without any of its appreciative signs, such as swelling, heat, redness &c. its source is consequently traced back to the organs of sensation - the brain and cerebrospinal c[illegible]. When the patient suffers no local pain but refers his distress to the derangement of some one or the other, of the functions, that alone at first demands attention and the general symptoms afterwards. But should this disorder be of a universal character, consisting rather of an involution of the general system than relating to any one function in particular - the physician under such circumstances, should examine the functions in regular order, first directe

to the patient's external appearance, expression of countenance, attitude and movements. If the voice appears unnatural, inquiry should be made as to the alteration in tone. Then the condition of the various sensations, moral affection, disposition, intellectual faculties and the character of his sleep, should be known. The nutritive functions should next be examined, as condition of the tongue, appetite character of evacuations and state of digestion. The physician then notice the respiration, circulation, secretion, function of calorification and lastly if he deems it necessary, the generative functions should be known as to their condition. In seat of disease having been learned, it is of some moment to the practitioner, also to learn the extent to which it may have gone. For it is upon this knowledge we are to form our opinions, respecting the mildness or severity of an attack, and judge of the value of remedies given.

This information may sometimes be procured as in former case, by inspecting the exterior; especially if the disease appears to be cutaneous and confined exclusively to the surface. But occasionally the mucous membrane is simultaneously attacked, with the cuticle and considerable lesions revealed by post-mortem, in the viscera. To determine the nature and progress made in such lesions is much more difficult, and requires other aid besides mere perception. And notwithstanding we are greatly impeded in the exploration of deep-seated parts, we can however judge approximatively of the extent of disease and with comparative ease. Thus by examining the abdominal walls we may learn the condition of the liver and spleen, and when there exists inflammation of the parenchyma of the lung, we can tell what portion is involved and can define the limits of its extent. In determining the nature of an affection it is

not always easy to decide, except when located on the surface and accessible to sight and touch, or when certain symptoms, both, peculiar pathological state of the organ then it becomes a matter easy enough.
But there are circumstances in which the seat of actual disease may be evident but its nature doubtful, for instance the existence of a tumor in one of the hypochondria, is readily recognized while its peculiarity may remain doubtful and unknown & vice versa. The nature of the malady from the accompanying symptoms, may be obvious while the locality may be uncertain. The former circumstance however is of greater account to the physician, as the treatment always has reference to the kind of lesion present, and is not materially influenced by its situation. In considering the elements of diagnosis, we must look upon the symptomatic phenomena, the period of disease and the type it assumes in or almost

importance — To [illegible] a patient
in distinguishing the [illegible]
out the agents that we are to be guided
in attributing to the cause its mildness or
malignancy, and by the stage and [illegible]
of the disease, that we are to be directed
in the administration of remedies —
The difficulties which beset the path
of diagnosis are great, and the practitioner
finds himself beset on every hand by
obstacles with which it is for him alone
to grapple and contend, that most man-
may receive the profits of his [illegible] and
be benefited by his toils — We
may be considered every phenomenon
that tend to complicate and mask
the original disease, and require no
less the scrutinizing gaze of the acute ob-
server, as well as the discriminating
judgement of the most skillful to guard
against Error and false conclusions —

An Inaugural Dissertation

on

Dyspepsia

Submitted to the Examination

of the

Provost, Trustees and Faculty of the

University of Maryland

FOR THE

Degree of Doctor of Medicine

BY

Isaac Ludlick

of

Virginia

1.8.4.4

To describe a disease accurately, to point out its true nature, its symptoms, causes and the best mode of treatment, is one of the most comprehensive and [illegible] [illegible] which the fruits of experience and [illegible] the bed side of suffering humanity.

As a student, just entering the field of medical research, and in the practical study of the profession, I feel much embarrassment in attempting to discuss a subject, so intricate in its nature and so complicated in its phenomena, as the one before me. Have a thoroughly heated [illegible] [illegible] trained with no [illegible], [illegible] by no models, baffled by no obstacles, and whose conclusions are the products of elaborate experiment, patient observation, and a long and arduous career in the healing

The subject is [illegible] complicated, causes, complications and treatment of "dyspepsia". The [illegible] dissertation [illegible] "indigestion" of [illegible] and [illegible] [illegible] considerable, and probably have omitted many important points relative thereto, as the scope of our [illegible] time [illegible] for a full discussion of this [illegible].

[illegible] a catalogue of [illegible] which this [illegible] are [illegible] [illegible] more consideration, and not many [illegible] [illegible] in establishing the [illegible] and the most successful [illegible] that this [illegible] disease, "dyspepsia" its great prevalence, its aggravating character, each should enlist the attention and [illegible] [illegible]

[illegible] disease [illegible]
[illegible] the [illegible] of [illegible]
[illegible] ailments, and probably the causes
[illegible] [illegible]
[illegible] imperfect or vitiated chyme will afford
[illegible] or insufficient nutrition; abnormal
or morbid secretions [illegible]
[illegible] implicated in the morbid action
[illegible]
[illegible] or unwound, and the effect
[illegible]
[illegible] stimulus is diminished [illegible]
and [illegible]
participate in the impairment. Nor, if
the organ is unduly exercised, it consumes
a disproportionate amount of nervous energy
[illegible]
[illegible] thus is destroyed, inducing

[illegible] sorrows, suffering, disease.

By the term dyspepsia, we understand that there is functional derangement of the stomach causing or interrupted digestion. It usually runs a long course before any [illegible] urgent symptoms make their appearance [illegible] approach and apparently mild and simple in its [illegible] is too much neglected. Scarcely a day passes by, in which we do not hear bitter complaints of a [illegible] headaches, and [illegible] indigestion, [illegible] demands, the penalties of violated laws.

Before proceeding to detail the symptoms of this malady, I will make a few remarks regarding the heart in health. This consists of the [illegible]

into a fluid form, or be regurgitated, in order that its nutritious portion may be taken up by the absorbents and appropriated to the nourishment of the body. For the accomplishment of this, it is necessary that the contents of the food should be subjected to the process of mastication, mixed with the saliva, then carried into the stomach by the act of deglutition, there mixed with a fluid, capable of preparing its solution and rendering chemical changes. By this which, it passes into the duodenum, the commencement of the small intestine, particularly with the secretions of the liver, pancreas and duodenum itself, then conveyed through the remainder of the intestines, the nutritious portions being taken up during its passage and the residue excreted.

The operations to which the aliment is subjected in the stomach, are mechanical and chemical; mechanically kept in a state of agitation; and each portion brought into contact with its walls by muscular contraction, to facilitate its thorough intimation with the secretions and full subjection to the chemical action.

The gastric juice is a strong digestive acid liquid, of an acid reaction, which constituents are yet, a subject of discussion. But its several properties are attributed to phosphoric acid, in combination with the acids, and to a ferment, pepsin.

Dyspepsia is described by many authors as having been formerly acute and chronic, or simple and bilious, but the so nomenclature has given place, now in

several, the same general causes giving rise, and the indications for local bleeding the same. I will consider these heads.

First, of the symptoms. The most common of these are [illegible], flatulent eructations of gases and acrids, nausea and vomiting, headache, air in back and limbs, heartburn, uneasiness or pain in epigastric region, and piles.

Anorexia is a frequent symptom of dyspepsia, and of the only one marked, the patient loses his appetite, retains kinds of food, which formerly he was fond of, but this relish is destroyed. The nature of this occasions, instead of a morbid craving for food, the patient cannot eat, [illegible]

that he could devour all that is placed before him, yet when he freely indulges, satiety is not produced, but uneasiness, pain, or an inverted action of the stomach depending upon the morbid sensibility of the primæ viæ.

The precise condition which gives rise to the sensation of hunger is a subject of some discussion. By some, it is supposed that it is [illegible] the action of the gastric juice upon the coats of the empty stomach. This is disputed [illegible] that this fluid is secreted, only when the [illegible] is the presence of alimentary matter. Other theory is, that it is produced by a determination of blood to the stomach under the influence of the nerves. It is

very much influenced by habit.

Flatulence is a very common symptom, and sometimes a very troublesome one, distending the stomach, and producing paroxysms of hiccough. It may come on two or three hours after a meal, or when the stomach is empty. The first depending upon the formation of the retained aliment, and the latter probably arises from the abnormal secretions thereon. Eructations of gases, sometimes felt in addition of liquids, mingled with portions of food which may be intensely acid to the taste, and producing a sense of excoriation in the fauces. It is occasionally mingled with bile, caused by a regurgitation of that liquid from the duodenum.

Nausea and Vomiting are two of the most distressing symptoms of dyspepsia. They are not

as common as the preceding, being more frequently connected with the cause from which we sometimes meet with it in children even. They generally depend upon the morbid irritability of the mucous coat of the stomach. In this condition the acrimonious acid irritated action ensues, and the contents are expelled in the unnatural direction. These symptoms may occur at the same time, or either one of them may be absent. The matters expelled usually consist of indigested aliment sour or acrid to the taste, and if continued for some time, become mixed with bile, which is nearly always the result of forbidden vomiting; depending upon the adhesion of the irritated action to the duodenum. These symptoms are sometimes dependent to worms.

Pain in the head is another very common symptom, indeed, in the

majority of individuals who have weak stomachs, headache will be brought on by some slight imprudence at the table, or by the loss of an accustomed meal. If it be connected with nausea and vomiting it is called by the popular name sick headache, or bilious headache, vomiting generally relieves it, by removing the bilious substance from the stomach. This pain is attributed to nervous sympathy, the ganglionic or sympathetic system providing a medium of connection between the stomach and brain. The cerebral symptoms are sometimes very violent, so much so, as to mask the primary affection, excessive pain, great dizziness or stupor.

Uneasiness or pain in the epigastric region, varies much, in severity in different cases. We hear many complaints

of a sense of weight or oppression, often amounting to pain, in this region, after taking food and continuing thro' out the process of digestion. Sometimes it does not occur until three or four hours after eating, or when the stomach is empty. A peculiar burning sensation known as cardialgia or heartburn is often experienced. The undue acidity of the secretions in dyspepsia are the causes in most instances. Vertical pain would cause suspicion that the mucous coat was inflamed, especially if there was tenderness upon pressure, which should be distinguished, as the beginning of the one would be very weak thereby. The pain frequently extends to the back and limbs, another form of pain, spasmodic in character, and termed "cardiodynia" by Cullen, is said to be nothing more than

dyspepsia, becomes frequently with in la-
-monatory affections of the ovaries, and
hysteria in the female, and with pelvic

Pruritus may be fo
an occasional symptom of chronic dy
characterized by a more or less copious secre
tion of a thin, insipid, watery fluid, consist
of the albuminoid secretion of the stomach.
This is sometimes accompanied with some
cutaneous pains, and occasionally is the
result of organic disease. But many cases
in which this symptom had been very
prominent, post mortem examinations
revealed no appreciable change of structure

Palpitation of the heart
commonly comes on in paroxysms, often
alarming and disturbing the patient
considerably. This is an nervous palpitation,
and may be distinguished from organic

disease by the pain which is attended by its natural frequency as much as the pleura on subsides.

The pain is usually fixed, stationary and moist, frequently with dullness with a white or brownish fur. In unfavorable cases there is patter of an abscess, sometimes the lesions spread in and below the region of the heart, from an anemic condition of the body; limbs cannot from nervous irritability, anxiety of mind and low of spirits. The symptoms vary much in different cases.

Among the complications of this malady, erysipelas is one of the most common; among from a depletive medical of the calm of nature, and impaired sensibility of the intestinal tract, the contents not affording the requisite amount of

stimulus for the production of normal peri-
staltic action. On the other hand, there is
occasionally diarrhœa, resulting from morbid
sensibility of the canal, or excessive secretion.
The intractable disease hypochondriasis
is a frequent concomitant of dyspepsia. It
is characterized by a peculiar state of mind
bordering on insanity, and hence is a species
of insanity. The functions of stomach are
undoubtedly much embarrassed by men-
tal derangement, and particularly in
this form, where the patient attention is
constantly directed to every morbid
sensation, even slight and transient in
its nature, and apprehensive of evil
not originating therefrom. Lastly, disordered
functions of the digestive apparatus are
starting point, of hypochondriasis. We
seldom meet with a severe case of

dyspepsia in which this state of mind does not exist in a greater or lesser degree, the converse being equally true, that there are but few non-hypochondriacs whose digestive organs are in a condition of normal activity.

Epilepsy in children sometimes originates from a pitiful digestion. Asthma, phthisis, affections of the urinary functions &c., are frequently consequent on dyspepsia, and very often are their direct parent to this disturbance.

Having thus imperfectly considered the most prominent symptoms, and a few of the concomitants, I will now mention some of the causes which give rise to dyspepsia. These are numerous and various. Excess of diet is one of the most fertile sources of this

[illegible] evil is [illegible] more [illegible] of the [illegible]
[illegible] applying [illegible] remedy [illegible] [illegible]
his reasoning not deserved, indeed, [illegible]
[illegible] in that which gives him [illegible]
of the present, regarding [illegible] [illegible]
What a calamity it is that at the end
[illegible] [illegible] [illegible] [illegible]
[illegible] stomach, [illegible] [illegible]!
What person can be [illegible]. [illegible] [illegible]
[illegible] for the [illegible] of the [illegible]
[illegible] by the [illegible] [illegible] [illegible]
the [illegible], [illegible] [illegible] [illegible] [illegible]
[illegible] with [illegible] [illegible], [illegible] [illegible]
[illegible] [illegible], or by continued indulgence
the [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
of [illegible], [illegible]. Examine [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

peculiar, or rather pernicious action, which they exert
the mind.

The use of the fine arts, is also a great
influence, as well as on mind, very
much in the distribution of our pleasures
or bringing happiness, each in a certain
kind of the sensation, depending in the mind
The importance of taste appears from the
attention to this fact in dispositions in the mai-
tenance of health, protected feeling, by general
calm, food taken in moderation or at long
intervals. The habits and modes of life with
the use of wines, and the [illegible] paid to
other things for the [illegible] not in [illegible]
with the long health. The [illegible] of
[illegible] protected [illegible], mind
of mind with insufficient [illegible], expressed
to deep and [illegible] &c. or principle [illegible] of [illegible]

The nature of this world is

not yet a known. It is not inflammatory, but it is considered to depend on a deficient quantity and impure quality of the gastric juice, together with a relaxed state of the mucous coat of the stomach.

The only disease with which it is liable to be confounded, is chronic cathartic, but even this may be distinguished by the appearance of the evacuations and effects of bleeding. The cathartic has in many respects a reddish yellow tint, with the fecal matter deposited in the ignorance vein. The pepsic bleeding is antiphlogistic, but this would accompany dyspepsia.

The prognosis is good, unless complicated. Supporting strength, and a restorative regimen, invigorating the system and strengthening the constitution.

I will now take a few observations relative to the treatment of dyspepsia. The table of this class of medicines, which have, at various times, been adopted for the cure of this disease, even if not

and; [illegible] sufficient, [illegible] would be [illegible] and [illegible] of [illegible]; therefore [illegible] the medicine [illegible], the [illegible] is based upon the evidence of [illegible] and [illegible] the [illegible] purpose.

The first indication is to [illegible] the [illegible] and [illegible] the [illegible] symptoms. The [illegible] acid [illegible] with [illegible] the [illegible] vegetable salts or acids. Of these [illegible] the [illegible] the [illegible] These salts or bicarbonate of soda may be [illegible] for the [illegible] the [illegible] Tonics are the medicines which do more to relieve the general symptoms, and to restore strength to the system. Among those recommended by the most experienced

on the chalybeates, quinine, strychnia, the mineral acids, vegetable bitters, &c. If the pain be severe, not relieved by the almond emulsion, opium, combined with an opiate to check its cathartic effect, is often serviceable. Also hydrocyanic acid is recommended. For flatulence, the alkalies is valuable with aromatics. Vomiting is usually arrested by cooling the diet of the patient, the effervescing draught is often efficacious, moreover. For constipation mild aperients, repeated, as that required, are to be resorted to daily. The colocynth pill, combined with aloes, is highly recommended. Pyrosis, is often corrected by bicarbonate of bismuth. But with these I have had but little experience, and am unprepared to give the directions of other authorities.

The all important object is to remove the cause, which, if accomplished, will, in most cases, fulfill every indication, by restoring the invalid to health and activity. And I will that this is

attained, a permanent cure cannot be accomplished. We can administer medicines which will relieve the uneasy symptoms, and for the time, the patient may think himself well, but, if there is an organic lesion in his part, if the nervous state, the same cause which brought him to this condition, can aid only little or nothing in the end. "Similia similibus curantur" does not apply in this case, that is, if a person contracts dyspepsia by, say an ale table, or anything else, the same contained in the ale will not cure him.

Now, for instance, the average man, that his mode of living, his [illegible] habits, on the one of his health, is often difficult, to induce him to change or abandon them, is sometimes impossible. Still we are occasionally successful, and should persevere.

The vegetable remedies, properly combined, in my opinion are the best agents for the treatment of dyspepsia.

Having been connected with a public institution for nearly a year, I have had a fair opportunity for-

[illegible] the influence of latent, [illegible] morbid action, and is made a case [illegible] healing and curative powers. Its [illegible] application is a powerful agent, and in the hands of [illegible] men is made to achieve many important results in the treatment of various diseases. Yet these establishments are conducted on [illegible] "[illegible] principles" as it is [illegible] confining themselves to their own [illegible], [illegible] they depart from the [illegible] of the profession and are considered [illegible] the illegitimate.

By carrying on investigations and [illegible] operations in the [illegible] of the [illegible] which [illegible] have [illegible], for the relief of pain, for the mitigating [illegible] we do not [illegible] our high calling, our duties as [illegible] duties.

[illegible] [illegible] [illegible] [illegible] [illegible] restore health and [illegible] [illegible] function or structure, by [illegible] [illegible] that [illegible]

Before this fact is considered, we must bring the medicine-vitalizing operation, not merely to help, but to help according to the conditions of disease and health, according to the true laws of nature.

"To cure disease, or to alleviate the sufferings of incurable, is not the sole function of the physician. Which, or the prevention of, or mitigation of the disease." The constitution and debilitating influences which exist with health, morbid, and mental, impair and diminish the vital energies of this body, so that disease, beyond, and those which appear in health, but the physician, the disease comes on and destroyed, disease and death ensue not but. The health impaired and the conditions which the health, individuals and communities depend, humanity, which destroy the constitution and blight the prospects of the migrants, which diminish the comfort, life and attainments of man, is an important part of his mission. At the same time, in order, his first duty, supposed, and extending his opportunities of doing good to his fellow creatures

it is your work, is to obey the commandments of your heavenly Father, and to prepare ourselves for a reception into His glorious kingdom, where disease and death are unknown.

Gentlemen, I go over these facts, I feel impressed with a conviction of the importance of these contests, and of the i a hand I am in which these skeleton mounted. But nothing no pretension to originality, exception or power of illustration. Without these your imagination

An

Inaugural Dissertation

on

Rubeola

Submitted to the examination

of the

Provost, Regents and Faculty

of Physic

of the

University of Maryland

by

Hugh Martin

Del.

Rubeola

This is a contagious malady belonging to the exanthematous class characterized by an eruption with catarrhal symptoms. This resembles the others of the class in many particulars, first it has a defined and regular course, second an eruption, third arising from a specific cause, A period of incubation varying from one week to three after which the initial fever and about the fourth day the eruption this going through its changes

diarrhoea, after this the period of desquamation. During the course of this malady many complications are likely to arise, these will be treated of in another place. Measles never occurs sporadically, when they appear as an epidemic many become affected with them at the same time. As in other epidemic diseases the general course is strikeingly modified, Writers have made several varieties according to the regular

ity or irregularity of its symptoms, the nature of the attending fever and the character and violence of the local affections with which it may be complicated.

Owing to internal irritation in different parts the eruption may be delayed; some previous vice of the constitution or a malignant action of the cause may retard the eruption; these may also cause it to retrocede after having been out; the exposure to cold may also cause it to retrocede.

Symptoms. In the first stage the symptoms are the same as in other forms of fever, with these are catarrh, the eyes are suffused and a profuse discharge of tears, sneezing and coryza some soreness of the throat, roughness of the voice a dry hard cough sometimes tightness of the chest with dyspnoea. The bowels are generally constipated; in young children, if during the period of dentition, convulsions, not unfrequently occur.

In the early period there is every possible grade, sometimes nothing more than the ordinary symptoms of catarrh with little or no fever, while at other times the febrile excitement runs very high, and evidences of severe bronchial or pulmonary disease is presented, not infrequently the glands about the neck and along the margins of the eye lids become tumefied and swollen. The stomache about the third day becomes irritable, causing

nausea and vomiting.
On the fourth day the eruption begins to show itself on the face, it is somewhat raised above the surface, resembling flea bites, they are first in distinct small spots, it soon extends to the body and extremities, enlarge and increase in number running into each other forming patches of an irregular shape, leaving intervening spaces of the skin not affected.
The amount of the eruption varies from a few isolated spots to an

almost uniform redness.
Sometimes there is diversity
ties in the eruption
instead of its first app
earing on the face, comes
out on the body or on
the extremities in some
it does not spread but
confines itself to a
circumscribed space, or
where it first appeared.
When at its height, usual
ly on the third day of
its appearance, it is
attended with a troubles
ome itching of the skin.
The eruption fades away
as it came out, and
by the eighth day of

the fever. It begins to disappear from the back of the hands where it is most to remain the longest desquamation begins on the face in furfuraceous scales, it is completed by the tenth or eleventh day. The eruption and catarrh form the most uniform and certain diagnostic symptoms. Diversities, There is a form of this disease known as Rubeola sine Catarrho or French Measles, this has no power in protecting the system against the true

form, some make another, and contend that it is more common than the previous, it is without catarrh but has fever and eruption.
Measles sometimes occurs of a malignant character, the early stage may not differ materially from the ordinary form there may be greater frequency of pulse more dyspnoea with a tendency to delirium or stupor, and epigastric oppression. The prostrating effect is sometimes felt at the onset, and

only imperfect signs of reaction are witnessed; the eruption is apt to be partial and irregular of a livid purplish or flachish colour and interspersed with petechiae accompanied with a disposition to passive hemorrhage.

Complications. This disease is liable to many complications, an add to the danger, we find them numerey during the period of desquamation, but they may appear at any time during the course

The most common is inflammation of some organ contained in the chest, Bronchitis and circumscribed Pneumonia, Pleurisy is not uncommon, these will all be detected by symptoms indicating that some organ is not performing its healthy function. With these there is another more to be dreaded, Cancerous this is not an often but a frequent but sometimes appears. This disease will develope tubercles in those that are of scrofulous habits and, the patient be

the subject of consumption.

The changes found after death are not essential, death usually being caused by some of the complications, if from them; the signs will be found, but if not complicated, there is general congestion of the mucous membranes the blood of a blackish colour.

It is so rare that an uncomplicated case of measles proves fatal, that it is with difficulty that any changes can be found.

Diagnosis, This was for a long time confounded with Scarlatina, but is readily distinguished from it by the catarrhal symptoms, and the appearance of the eruption, which makes its first appearance on the fourth day; in Scarlatina on the second, and more uniform and diffuse, presenting innumerable points united together. In the first case; it may be mistaken for Small-Pox, but from this, by the fever, and the

character of the eruption, in Small Pox it soon becomes vesicular.
Prognosis, This will be guided by the form of the case; if of an uncomplicated nature, it will be favorable, if complicated our prognosis must be governed by the extent of such. If of the malignant type it will be unfavorable, and also if the fever is of unusual severity, and if the eruption is delayed or suddenly suppressed, under all these there

is cause for solicitude.

Treatment.

In the mildest form no medical treatment is necessary, save a mild aperient; the patient should be kept in the house and prevent exposure to cold. When of sufficient intensity to require medical attendance, a saline cathartic should be given and demulcent drinks to which a small quantity of antimonial wine may be added, to increase the diaphoresis. If the skin is dry

and hot the neutral mixture or the effervescing draught may be of advantage. If Pneumonia Bronchitis or Pleurisy present, blood letting must be resorted to, it should be drawn with tolerable freedom, no more should be drawn than is of necessity, as it may retard the eruption, or if out may cause it to retrocede, the general bleeding may be aided by cups and leaches. If the cough is very troublesome opiates should be used with

them some expectorant. The diate should be strictly antiphlogistic, during convalescence the patient should avoid exposure to cold, he should not leave the room until the stage of desquamation is passed and the catarrhal symptoms disappeared. In the malignant form stimulants and tonics are indicated, the delirium, and retrocession sometimes require attention. If it is dependant on cold, the eruption may be favored by warm drinks or the warm

bath; it is better to leave this to nature unless we have signs of irritation in some internal organ, then it would be proper to interfier;

I have hastely run over the treatment, which in a mild case is simple but in the complications and the malignant require attention, and judgement, to bring it to a favorable issue.

An

Inaugural Dissertation

On

Typhoid Fever,

Submitted to the examination

of the

Provost, Regents, and Faculty of Physic

of the

University of Maryland,

for the

Degree of Doctor of Medicine

By,

D. Hutchings,

Calvert County,

Maryland,

To Samuel Chew M.D.
Prof. of the Practice of Physic,
of the University of Maryland.

Sir,

I take the liberty of inscribing the following thesis to you, as an expression of my grateful remembrance of the value of your instructions, of my respect for those intellectual faculties which render you preeminent amongst the medical philosophers of our time, and of my admiration for those moral excellences which call forth the warm regard of all who are acquainted with your character.

That you may long be spared to be the ornament of your University and the honour of your city, is the earnest wish of

Your obliged pupil
D. Hutchings.

Typhoid Fever

This is a common febrile affection, which belongs to the mild manner, and is to be found in all the various

In this disease the functions of organs are deranged and out of order, those of the nervous system being first disturbed, then those of the vascular, and afterwards those of secretion and excretion.

Symptomatology. The symptoms of this fever may be divided into those, which are derivable from the nervous system, the vascular, the respiratory, and the digestive.

I will digress a little to say a few words, concerning the mode of accession of this disease and afterwards proceed to take up the symptoms in a regular manner. The accession of this disease is very various. In some cases the disease commences abruptly by a chill, followed by the usual signs of fever. Thomas says that this

[illegible] sudden in its mind
perfectly well, [illegible]
[illegible] in [illegible]
[illegible] of its commencement, he says that out of one
hundred and twelve cases, in which this point
was carefully ascertained, the attack was
sudden in seventy three, in the others there
were obscure premonitory symptoms. The disease
is attended in this [illegible] of [illegible] gen-
erally, comes on insidiously and increases grad-
ually, so that it is often impossible to fix the
place in time, its commencement. The patient
scarcely knows when he was taken sick, and in
the intervening weeks, or [illegible]
[illegible] days, perhaps for a longer time, he has not
[illegible]
[illegible] to have felt a sensation of mental and
[illegible]
[illegible] pitch [illegible]

or ache, the man is sad, [illegible] and the pain in the head, or in the back, and [illegible] with general feeling of oneness and fatigue. [illegible] the morning, he may experience some [illegible] of chilliness, alternating with heat. The function of digestion may be somewhat interrupted with, causing the appetite to be diminished and sometimes [illegible]. [illegible] the countenance in some instances, becomes [illegible], and the mind is [illegible] receive. There may be a little [illegible] of the arm, with pright pain in the abdomen [illegible] about the right iliac region, [illegible] of the [illegible] medicines.

These symptoms gradually increase from day to day, though it is an interval [illegible] life, with the gradual, irregular disappearance of the symptoms more [illegible] of the disease.

The disease being now fully established, I will proceed to dispatch [illegible] symptoms, viz. fever, which are obtained from the disordered [illegible] system.

Painful head is one of the most common and [illegible] symptoms in typhoid fever. It is generally [illegible] though in some cases, it is acute, and lancinating. The pain is most usually seated in the temples and forehead, though it may occur in any part of the head, or [illegible] head. This [illegible] is [illegible] in most cases. It generally lasts [illegible] days, after which it [illegible] as in a [illegible] disease.

Louis found that out of eighteen cases, in which his patients received [illegible] ache in all the bones, pains in the back and limbs are not unfrequently observed in this fever. According to some writers, there are more in the [illegible] in the legs than in the arms. These pains are subsidiary. Condition of the mind. The intellectual faculties are more or less disturbed in every case of this affection. There is mental languor and inability to carry on a train of associated ideas or reasoning. There seems to be a confusion of the intellect and forgetfulness. The patient is sometimes restless and impatient, though generally he is listless and indifferent, mind or [illegible] [illegible] the [illegible] [illegible] disturbance of mind [illegible] delirium or delirium. There is often an indisposition or [illegible] to be disturbed and the patient-

answer questions rationally, but in a short manner, as if angry. Occasionally there is morbid vigilance, with great restlessness and jactitation. Delirium is shown in most cases of Typhoid fever. In fifty [illegible] cases [illegible] there was delirium in thirty eight. It is not often seen in any considerable degree before the seventh day [illegible] In most cases it is mild and indicates a want of power in the brain rather than any irritation. This wandering or slight delirium is, at first, most conspicuous during the night, [illegible] the patient is [illegible] in some instances, however, the delirium is furious and maniacal, so that it is required to restrain the patient from deeds of violence to himself. It is not uncommon for the patient to have the idea that he is absent from home, and wishes to go there. A patient, when asked how he was,

[illegible] replied, that they were well. This is a very [illegible] in [illegible] [illegible] the delirium, in the [illegible] of the disease, is usually low and muttering. The patient lies with his eyes open, uttering incomplete and broken sentences. The restoration of the mind [illegible] though slowly and gradually, established. According to Hillier, delirium, [illegible] Physiognomy. The countenance is generally dull, [illegible] languid, and void of expression.

Sometimes, [illegible] The delirium, in most cases of typhoid [illegible] and the rapid march of the disease [illegible] found it in nine [illegible]

cases. Vigilance. This symptom is more common in the early period than in the later periods of the disease, and is more frequently present in the severe than in the mild cases.

Condition of the senses. The most common altered senses in this disease are, dizziness, spectral illusions and delusions, deafness, and ringing in the ears. Deafness is one of the recorded results of quinine poisoning, but is seldom a condition of the nervous mass, acuteness, hearing, being exaggerated. In some cases there is blindness, which is regarded as a great symptom. In the advanced stage of the fever, black vomit, bile, blood in the urine, mucous discharges, expectoration of the epithelial lining of the bladder, in consequence, it is supposed, of partial loss of vitality of the lining. The patient must be watched, lest he wander in his mind, or to keep them from the bed clothing. The sense of taste is imperfect or entirely destroyed.

[illegible]

[illegible] stages of typhoid fever, when this fever is extreme, the patient lies on his back with his limbs extended, and there is a great tendency to slide down [illegible] that the [illegible] stretched out upon his abdomen, with his face [illegible]

[illegible] in a good constitution, irregular contractions of certain muscles are often observed in this complaint. These contractions are most [illegible] the fingers and wrists, the [illegible] the body is wasted. Sometimes the great tendons of the face, and at some times the diaphragm is implicated, producing hiccough.

[illegible] instances. There is a [illegible] condition of the nervous system of the person. This depression is never [illegible] confined to cases, but to terminate the [illegible] the nervous phenomena appear [illegible] to [illegible] in the later periods of the fever. The [illegible] mental [illegible], [illegible] fatal cases. [illegible] condition [illegible] and [illegible], [illegible] [illegible] [illegible] to be less frequent in children than in adults.

The second class of symptoms are those which have [illegible] from deranged action of the vascular system. This class of depression are not less important [illegible] the nervous system, and should be carefully [illegible], as they [illegible] in [illegible] [illegible] provinces, and [illegible] to disease.

[illegible] depression [illegible] in typhoid fever [illegible] [illegible] observed this depression in [illegible] [illegible] [illegible] cases, in one-fourth of which they were severe.

by [illegible] cases, [illegible] but three were marked by chills, and of thirty one mild cases, there were seven in two days, we see by these statistics how [illegible] chills, are, on this disease, they occur often in children, as in adults.

Heat of the skin. The chill is succeeded by increased heat of skin, which varies much in different cases. In some instances, it is moderate and equally diffused over the whole body, in others, it is high and burning, and often unequally distributed over the surface. In the latter stages of grave and fatal cases, the morbid heat often diminishes, and the skin becomes covered with sweat and clammy perspiration. In many cases this excessive heat is subject to exacerbations and remissions daily. The skin is generally harsh and dry throughout the whole course of the disorder, though in a

few instances there is more or less moisture of the skin. Dr. Smith speaks of cases in which there was profuse sweating over the entire body.
This sweating he called the washer-woman's sweat, because it gave a corrugated appearance to the cuticle on the palms of the hands and soles of the feet. This is a very unfavorable symptom. Dr. Smith says that he never saw a patient recover after exhibiting this phenomenon.
There is a peculiar odor arising from patients laboring under this fever. The odor being of a musty or semi cadaverous smell.
Pulse, the circulation is nearly always accelerated; indeed, this increase of the circulation has been considered as essential to fever, but it is not universal, therefore not essential.
The frequency of the pulse ranges from seventy to one hundred and sixty beats in a minute. Occasionally the pulse is found slower than

natural, being in some cases as low as sixty pulsations per minute. This preternatural slowness of the pulse is owing to congestion of the brain. The frequency of the pulse bears no direct proportion to the heat of the skin, but as a general rule it is in direct proportion to the severity and danger of the disease. The pulse is more frequent in females, and children than in males. In the last stages of the disease, the pulse, along with its frequency and feebleness is sometimes irregular and intermittent; and Louis has found this condition of the vascular system connected with softening of the heart.

The symptoms derivable from disordered action of the respiratory functions are few and unimportant in cases of simple or uncomplicated typhoid fever.

The most prominent of these symptoms are an

increased frequency of respiration during the febrile exacerbations. In severe grades of the disease, and particularly in the latter stages, when coma or delirium supervene, the breathing is noisy, stertorous and irregular.

This irregular and stertorous breathing is not dependent upon disease of the respiratory organs, but on a morbid condition of the brain.

Typhoid fever is usually attended with more or less cough, which is generally dry and hacking. The auscultatory sign most frequently observed in typhoid fever is a dry, sonorous or sibilant ronchus. Now and then humid and mucous ronchus is present.

The symptoms which we derive ~~from the attain~~ from the deranged action of the complex function of digestion are of the greatest importance. This class furnishes us with symptoms most characteristic of this affection. We rely upon them

as one of our surest means of distinguishing between cases of this disease, and those of the analogous form of fever, called typhus. For this reason we should study them with especial care and attention.

Condition of the tongue and mouth. The tongue in the commencement of this disease is usually covered with a light fur and is not quite as moist as in health, showing a tendency to dryness and cracking, and often appearing white and red along the edges. Later in the disease the tongue often becomes darker over its whole surface; sometimes nearly black, glazed, stiff, and covered by cracks and fissures. The tongue in this condition is often protruded with a tremulous motion, and with difficulty, the tip and sides sticking to the lips and teeth. The teeth, gums and lips are often covered with sordes.

In some instances the tongue throws off this dark, disorganized flakes or patches, leaving the mu-

membrane naked, red and shining; and this process of coating and denuding may be repeated several times during the course of the disease. This process of cleaning in mild cases commences at the tip and edges, and in severe, often at the tip's centre or base.

Appetite and thirst. The desire for food is generally absent from the beginning to the end of the fever. Its return is a favorable symptom. The desire for liquid substances is usually increased. The thirst is proportionate to the degree of febrile excitement.

Gastric symptoms. In most cases of typhoid fever we find evidence of gastric disturbance. The most frequently these are nausea and vomiting associated with epigastric tenderness or pain.

Condition of the bowels. Diarrhoea is one of the most characteristic and constant symptoms

of this disease, I have observed it in all of this fatal cases but three. It varies much in different cases as regards the period of its commencement, degree and duration &c. As a general rule it bears a direct proportion to the gravity and severity of the fever. In very mild cases it is sometimes entirely absent. The diarrhœa varies in severity from one discharge to twelve or more in twenty four hours. In some rare cases, the diarrhœa precedes the fever; but oftener comes on during the first twenty four hours after the attack, though in some instances it is postponed to a much later period. The stools are generally liquid, turbid, and of a yellowish color, in appearance not unlike new cider. In a few cases they are of a dark brown color. Their smell is fœtid and offensive. They occasionally contain portions of blood and

sometimes they are dysenteric. According to Barthez and Rilliet diarrhoea is invariable present in the typhoid fever of children.

Abdominal pains. Pain in the abdomen is a very frequent accompaniment of typhoid fever. These pains are proportionate to the diarrhoea, therefore to the severity and gravity of the complaint. They make their appearance at various stages of the disease, sometimes in the first week, sometimes in the second and in others during the third week. They also vary in severity from a dull and aching character to a severe colicky griping. These pains are usually seated in the iliac fossa, the hypogastrium and around the umbilicus. In a certain proportion of cases, generally after the middle period of the fever, and sometimes during convalescence, there is a sudden supervention of severe pain in the abdomen, at first confined to a small space, but becoming

rapidly diffused over the whole abdomen.
The pain is accompanied by great tenderness on pressure or motion; tympanitic distension; rapid feeble pulse; extreme distress; nausea; vomiting; cadaveric features; and these phenomena are rapidly followed by death.
These are the symptoms of acute peritonitis; the consequence of intestinal perforation.
Tympanitis. Flatulent distension of the abdomen is a very common & a certain yet very characteristic symptom of typhoid fever. It seems to bear some proportion to the intensity and danger of the disease, being slight in mild cases, and excessive in grave ones. It generally makes its appearance during the latter stages of the fever. The distension varies much in degree from a slight rigidity of the muscles to their utmost distension, indeed it is sometimes so great as to cause severe dyspnoea

by pressing up the diaphragm. The stools rarely passes off per anum, and appears but little disturbed by the peristaltic action of the intestines. If pressure be made over the right iliac fossa, a gurgling sound may be heard, owing to the presence of fluid and gas there situated. This symptom has been thought by some to be diagnostic of the disease, but it occurs also in other disorders, consequently it cannot be a diagnostic symptom.

Unclassified symptoms. There is a set of symptoms which does not find any place in either of the great classes that I have adopted, therefore I have called them unclassified symptoms.

Some of these symptoms demand ~~a~~ special study both in a diagnostic, prognostic, and therapeutical point of view.

Hemorrhage. Epistaxis is present in most cases of typhoid fever. It appears early in the disease,

and is generally small in amount, though sometimes so great as to require the tampon to arrest it. Epistaxis is less common in children than in adults. Hemorrhage from the bowels takes place late in the disease, and is often great in amount. This is an unfavorable symptom, and injurious by the exhaustion it produces.

Cutaneous eruptions. The rose colored spots or eruption is one of the most characteristic signs of typhoid fever. This eruption consists in a small round spot, not a pimple, slightly raised above the surrounding skin, about as large as the head of a pin, of a bright red or rose color, terminating abruptly at the circumference of the spot, disappearing when the skin is made tense or pressed upon, but readily returning when the pressure is removed. The number of these rose colored spots is very

various in different cases. In some instances there may be only one or two present, in others, they may be innumerable. They generally come out during the second week of the fever. It appears in successive crops, each crop lasting three or four days. This eruption is not found in every case of this disease nor are they peculiar to it. By a careless or inattentive observer the rose spots may be confounded with, or mistaken for those produced by the bite of a flea or the the sting of a musquito. The rose spots may be distinguished from flea bites, by the latter being a round red stain with a dark point for its center, and its color fading gradually off into that of the surrounding skin. The rose spots may be distinguished from musquito bites, by observing that there are musquitoes in the room, and by their spots occurring on parts exposed, whereas the rose spots generally appear on the chest

or, abdomen.

There is another eruption, found in typhoid fever called sudamina. The sudamina are oval or circular, vesicles, varying in size from that of a pins head to that of a split pea. They are formed by the presence of a limpid, liquid elevating the cuticle. They are usually seen, about the neck, axilla, and groins. In order to see them we should look at them obliquely not perpendicularly. They appear late in the disease, being rarely observed before the twelfth day. They are not of much value as a diagnostic sign being seen in other diseases attended with considerable sweating.

Eschars. Owing to enfeebled vitality, and long continued prostration, ulcerations often occur upon prominent parts of the body. The skin is occasionally affected with erysipelatous inflammation. Blistered surfaces are very apt to slough owing to diminished vitality.

Pathological lesions. There is scarcely a single organ of the body, in which signs of inflammation are not sometimes found after death from this disease; for it is one of the peculiarities of this affection to develope local disease of an inflammatory character. These lesions may be divided into those which are essential, and those which are non essential to the disease.

There are only two changes which we may class as essential to typhoid fever, viz. alterations of the glands of Peyer, and of the mesenteric glands. No opportunity has been offered of ascertaining the condition of the glands of Peyer earlier than the sixth day. They have been examined, however, at all stages after the sixth day of the fever. At first the patches are observed to be thickened and elevated above the surrounding mucous membrane. Some of them are of a darkened color, some pale and others of an inter-

mediate line. Louis makes two varieties, the hard and the soft. The former are hard to the touch, and, when dissected, the submucous cellular tissue is found to be white, condensed and built. The latter are softer, less elevated and destitute of that alteration of the submucous cellular tissue which is seen in the hard variety. The elevation of the glands is owing to an inflammatory thickening of the mucous membrane covering the patches and of the submucous cellular tissue. In a case of typhoid fever, we may find some of the patches hard and some soft, and sometimes a portion of one gland is hard and the other soft. They are observed in that part of the intestine opposite to the attachment of the mesentery. They do not all originate at once, but in general come successively, those near the ileo cecal valve first appearing, and afterwards those higher up, even into the jejunum. The consequence of this successive ap-

pearance is a difference in the degree of their developement, the earliest being most advanced, the hard patches may undergo resolution or ulceration; the soft always ulcerate. In some instances the floor of the ulcer is the muscular coat, in others in consequence of the destruction of that tissue, it is the peritoneal coat, and this is occasionally found penetrated, so as to form a communication with the cavity of the peritoneum. Louis observed this condition in eight cases out of fifty five. Sometimes there is only one orifice, sometimes two or three. The perforation is caused either by the progress of ulceration, by mortification of the uncovered peritoneal membrane, or by its rupture from force applied within the intestines. The ulcers are not necessarily fatal; they have been found undergoing the process of cicatrization when examined after death.

The mesenteric glands are as constantly found

diseased as the glands of Peyer, those glands corresponding with the diseased patches are generally found most affected. The glands are reddened, softened and enlarged, and sometimes exhibit traces of pus.

The nonessential lesions are many and various. We will first consider those which are found in the alimentary canal. In one sixth of Jenis fatal cases, the pharynx was either ulcerated, covered with false membrane, or infiltrated with pus. The oesophagus is occasionally found ulcerated, the ulcers being small and superficial. The gastric mucous membrane is often diseased, being softened, thinned, reddened mamellonated, ulcerated &c. There is no proportion between the gastric symptoms and the gastric lesions observed after death. The duodenum is not often found affected. Its lesions are similar to those in the stomach.

The solitary mucous follicles are sometimes affected in the same manner as the glands of Peyer, being hardened, softened, enlarged and ulcerated &c. The mucous membrane of the colon occasionally shows signs of inflamation, such as redness, softness and ulceration. The colon is generally distended with more or less air. The spleen is usually found softened and enlarged, sometimes very much so. The liver is sometimes softened and paler than natural. The heart is in most cases softened and the inner coat of the aorta tinged red with blood, probably by imbibition.

The epiglottis and larynx are sometimes found ulcerated or coated with inflammatory exudation. We generally find evidence of inflammation of the mucous membrane of the bronchi, and of congestion or inflamation in the substance of the lung. The nervous symptoms

being very prominent in this disease we should expect to find corresponding lesions in the brain, but this is not the case. The brain is quite healthy in a large proportion of cases. In some instances, the membranes have shown evidences of congestion or inflammation; serous effusion has been observed; and the substance of the brain has exhibited red point when cut. Between these lesions and the cerebral symptoms, no satisfactory connection has been traced. The blood does not readily coagulate, and always contains less fibrine than in health.

Complications. Typhoid fever is frequently complicated with gastric or hepatic disorder. When, along with the characteristic symptoms of typhoid fever, we have much nausea and vomiting, often of bilious matter, tenderness of the epigastrium,

and not unfrequently yellowness of the conjunctiva or the skin.

Typhoid fever is almost always complicated with more or less derangement of the respiratory organs, the most common complications being bronchitis or pneumonitis, evinced by tenacious or bloody expectoration, shortness or difficulty of breathing, sometimes pain in the chest, and the auscultatory signs of crepitation and dullness.

In other cases the brain is especially involved. In some cases we have inflammation of the brain evinced by the symptoms proper to that affection, in others, we have signs of deficient action in this organ, dependent upon either a direct loss of power or an altered state of the blood.

cause. Concerning the nature of the essential cause of typhoid fever, but little is definitely known. There are, however, some circumstances which seem to favor or influence its action. Thus age exerts considerable influence in the production of typhoid fever, the disease being confined to early adult life, occuring generally between the fifteenth and thirtieth year of life, though it has been observed as early as the seventh month and as late as the seventy-eight year of life. Recency of residence is supposed to exert some influence in the causation of this fever, but it is very doubtful. The disease has been considered by many to be contagious, though now it is generally believed to be not contagious or if so but feebly and under peculiar circumstances. It rarely attacks a person the second time. Typhoid fever sometimes prevails epidemically in country places,

Diagnosis. By the slowness and insidiousness of the attack; by the diarrhea; the dusky hue of the countenance; the epistaxis; the gurgling in the right iliac fossa; the tympanitis; the rose colored spots; the stupor and delirium; the appearance of the tongue; and lastly, by the duration of the disease, and the peculiar musty smell when the skin is dry, and acid smell when it is moist.

Prognosis. Not even the mildest cases can be looked upon as free from danger, and on the other hand there is no condition so low, no symptom so fatal, that death should be considered inevitable. Among the unfavorable symptoms, are constant delirium a belief on the part of the patient that nothing ails him, a sudden shifting of position on his elbows, deep coma, stertorous respiration, great subsultus, rigidity of the limbs, profuse diarrhea, or

hemorrhage from the bowels, great prostration and frequency of the pulse, and excessive tympanitis. The favorable symptoms are diminished frequency of pulse and heat of skin, increased consciousness and interest in surrounding objects, a restoration of healthy secretion, and a disposition in the tongue to become moist and clean.

Treatment. In the treatment of typhoid fever there are four principal indications to be fulfilled, viz, 1st to eliminate all sources of irritation, both external and internal, physical and mental.

2d. To diminish vascular excitement.

3d. To support the system.

4th. To combat local affections or inflammations.

The first indication is to be accomplished by putting the patient in a well ventilated room;

by using a light diet; by the use of mild laxatives when required, and by keeping the patient as quiet as possible both in body and mind.

The second indication is to lessen vascular excitement. This may be done by venesection, when the pulse is full and strong, and there is sanguineous congestion to the brain, though as a general rule, it had better be omitted; for it cannot arrest the disease, and, moreover, as it has a tendency to run a protracted course, no blood should be drawn unless imperatively demanded. Less harm is so much more serious even under similar circumstances.

Diaphoretics are a class of remedies that can not be too highly appreciated in this affection. They are useful throughout the whole course of the fever, the vigorous diaphoresis being best in the early stages, and the stim-

ulant, in the last stages.
In the first period of the fever, some practitioners recommend the antimonials as a diaphoretic, but in general they are too much disposed to irritate the stomach and bowels. Dr Wood prefers the citrate of potassa, in the form of neutral mixture, or effervescing draught. Dr Watson, the chlorate of potassa. These may be given throughout the disease, when the skin is hot and dry, and the pulse not very feeble. For the first few days, if the stomach and bowels are not irritable, we may add small doses of tartar emetic to these diaphoretics. Sponging with cold water is very useful in diminishing the heat of the surface.
The third indication is to support the system. The period at which it becomes necessary to have recourse to the use of tonics and stimulants varies greatly in different cases. Sometimes, in very

feeble constitutions, or during the prevalence of typhous epidemics, the debility presents itself very early after the commencement of the disease, but much oftener, it is not observed until some time in the second or third week. The practitioner must be influenced by the state of the pulse, that of the skin, and the general evidence of a typhous condition of the symptoms. When the pulse is at once slow and feeble, the skin cool, and the tongue and teeth incrusted with dark cordes, there can be no doubt of the propriety of using stimulants. If tonics and stimulants increase the frequency of pulse and heat of skin, and, augment delirium or stupor, they must be omitted. If they, on the contrary, lessen the frequency and increase the fullness of the pulse, relax the skin, moderate delirium, relieve nervous disorder and promote refreshing sleep, then

may be considered as acting beneficially. The mildest should be first used. The diet is to be made more stimulating. The stimulants most frequently used are the following, the infusion of serpentaria with sweet spirit of nitre, comp. infus. of bark or sulph. quinia, wine whey and salt, ammonia, pure wine, brandy, opium, or when the prostration is extreme, sulphuric ether. When coldness of skin is connected with debility, powerful rubefacients should be used in connexion with internal stimuli. In the advanced stage of the disease, when the tongue is dry, the urine scanty, and the skin parched, and there is delirium, or increased stupor, with an abatement of the vital actions, no remedy is so effectual as mercury, given so as slightly to affect the gums. Either blue mass or calomel may be used. Should the disease not yield, especially if

the tongue remainders, and the abdominal distension undiminished, Dr Wood recommends the oil of turpentine, particularly in that stage of the disease, when the tongue, instead of cleaning gradually from the edges and tip, parts rapidly with its fur, first from the middle or back part of its surface, which is left smooth and glossy, as if deprived of its papillæ. It should be given in doses of from three to twenty drops every three or two, and it may be continued for two or three days.

The fourth indication is to combat various local affections and incidental complications.

Typhoid fever is sometimes associated with active determination of blood to, or inflammation of the brain and its envelopes. When thus complicated our treat

ment must be more active.

It may be necessary to bleed generally, if the symptoms will admit of it, or if general blood-letting be not necessary, we should apply cups or leeches to the back of the neck, thin the hair or cut it off entirely, and use cold to the head. When there is obstinate delirium or coma a blister should be applied to the shaven scalp. In excessive subsultus, great nervous restlessness, jactitation and singultus, antispasmodics should be used, as assafetida, musk, camphora and opium.

When typhoid fever is complicated with pneumonia, or when the bronchitis is severe, venesection should be employed if the condition of the patient will allow it; or if his condition is such as not to call for general bleeding, blood is to be taken

locally from between the scapula by leeches or cups, and other means should be used in conjunction with bloodletting to subdue the inflammation.

Should considerable tenderness be found to exist in any part of the abdomen, a few ounces of blood should be taken by cups or leeches from the tender spot; and afterwards warm fomentations or emollient cataplasms, and rubefacients is to be applied over the abdomen. If the diarrhea become exhausting, it should be checked by chalk mixture, small doses of opium and ipecac, to which acetate of lead, Kino, ext. of rhatany or tannic acid may be added if necessary.

In copious epistaxis, if the usual remedies fail, the anterior and posterior nares should be plugged,

Hemorrhage from the bowels is to be arrested.

by acetate of lead, kino, and phiteny with opium.
Erysipelas is best treated by mucilaginous applications, or locally, by the use of nitrate of silver or tincture of iodine.
In cases of peritonitis from intestinal perforation, opium is to be given in large doses, the patient to be kept perfectly quiet, and in the avoidance of all substances internally, which can in any manner disturb the bowels.
To prevent the formation of sloughs from pressure, the patient's position should be frequently changed, and if the parts become red, they should be bathed with spirit, or protected by lead plaster, the state of the bladder must be attended to, and if there be retention of urine, it is to be drawn off with a catheter. During convalescence, the patient is to avoid all errors in diet, and fatigue.

Finis

An Inaugural Dissertation
on the subject of

Parturition

Submitted to the Provost Regents
and the
Faculty of Physick
of the
University of Maryland
for the
Degree of Doctor of Medicine
by
Charles Walter
of
Baltimore
Maryland

In selecting a subject upon which to base the few remarks I am about to make, I find none of more interest, and importance, than the subject of Parturition.

As civilization advances, as wealth increases, as luxury abounds, so do we find the services of the true medical man more required, and the nearer the human family are to the brute creation, so do we find the call for the services of the medical Man decreased.

As woman is said to be God's last gift to man, so it becomes the man's absolute, to quite understand (as far as it is in his power) through the long and tedious period of a woman's life.

We do this successfully, he must be perfectly acquainted with the subject of Parturition.

Labour is a function, which is accomplished about 9 months after conception. It is divided into Natural and Preternatural Labour. It is of the former, and its phenomena only, of which I am about to speak.

Natural Labour may occur in three times in which the presenting part comes down regularly, and

Labour is terminated without
danger to the mother or child.

Preceding labour as have the
premonitory symptoms etc.
About the middle of the 9th month
the patient begins to experience
uneasiness in the abdomen, inclining
to cutting pain. The abdomen
begins to subside on the fœtus
which before reached the ensiform
cartilage, can now be felt low in
the abdomen.

Frequent micturition, and irri-
tation of the rectum, from pressure
of the uterus on these organs are fre-
quent concomitants.

The secretion of the vagina, and
cervix, it tends to relax the parts as
well as well as to lubricate the so-

This secretion has occurred shortly before labour comes on, and is called by nurses the "Show."

Labour is divided into three stages. The first stage is ushered in by the commencement of a true pain, and ends with the complete dilatation of the OS Uteri, or opening of the mouth of the womb.

The true pains may be distinguished from their imitators by an increase in the lower part of the pain, or first pain in the back extending to the loins.

The pains are of two kinds 1st the cutting or grinding pains, and 2nd the expulsive or bearing down pains. The 2nd is true.

The first pains are indicative of the

of the first stage, and are seen on
the very pregnant, but increasing in
size much earlier.
They are generally seated in the back,
or extend down the first
thighs. The water bag, which
is an essential diagnostic sign
of the first stage of Labour.
At the beginning of the 1st
stage severe rigors sometimes occur
in presence of a small hydatid cyst.
The pulse continues at its natural
standard until the 2nd stage.
An examination will now reveal the
state of the Vagina, and the Uterus.
The Vagina which was cool now
becomes moist, and dilate, the
Os uteri will be found gradually
dilating to admit the rectal finger.

In the Os Uteri divides the distinguishing from the Vagina is shewed with blood, from the rupture of the mucous vessels, particles immediately around the Os Uteri.

At this stage the membrane is ruptured, the waters are discharged, and the head comes through the Os Uteri, the first stage of labour is completed.

The Phenomena of the Second stage is immediately apparent.

The pains now become more frequent, the pains are quickened in their rapidity and more severe, the woman is hardly able to bear it.

They are called expulsive, or bearing down pains, as it demands a bearing down exertion.

Vomiting may occur at this period: it is as much the effect of pregnancy, as sympathetic irritation, it is beneficial, as it tends to relax the soft parts.

It also a symptom in unfavorable cases, and should be attended to if symptoms are violent as frequent pulse, anxious tongue, etc.

The pulse if the 2nd stage be prolonged, bears an answer as often, begins, nausea should be regarded by it she should not be disturbed, but if it is accompanied with headache, and is excessive, with fullness is required, particularly in first cases:

In the head advances the pregna

of the head on the pelvic nerves causes cramps of the lower extremities which may be relieved by friction.

If an examination is now made the Vagina will be found flabby and rugous, the head can now be felt in the pelvis descending at the pain are then recedinwards the expulsion excelling the retroception. A wise provision of nature, for the protection of the life of the child.

In a short time the head will be found distending the perineum, the pains are at their maximum, since such pain is just to prepare to cause upon its predecessor an in the hour the perineum is softened, and the parts prepared for extreme distension.

The pains [illegible]
a quarter of [illegible]
the pain commencing before the other
bearing indes.

At [illegible] with [illegible]
[illegible] and bite a [illegible]
the head is born; after which there
is a short rest, equal to 2 or 3 pains
and then the body is born, ending the second stage.

The patient now experiences a
[illegible] sensation, after her intense suffering, and often expresses
herself as if she was enjoying the
delight of [illegible].

If the hand be placed on the abdomen
the uterus will be found large, and
[illegible] contracted.

The third stage of labour includes the detachment of the after birth or placenta.

In most cases it is detached, and remains in the Uterus to be expelled by the natural contraction of the Uterus, which generally comes on within a half hour after the expulsion of the child.

This ends the first stage and labour is completed.

Management of Labour.

The first duty of an attendant of Labour, will be regular of the injections but his presence, but he cannot tell how the labour will be natural or the patient recover as it but for he should always attend the summons immediately

When a Physician is sent for in a case of labour, he should have his pocket case, containing a pair of Simpson's lightures with him.

When he arrives he should make himself to the nurse, he should prepare the patient for his examination, after being in the room a short time, he is then to ascertain, whether the patient is in labour, or not.

Having ascertained this, he should ask for an examination of the nurse, who will prepare the patient, and place her in the proper position.

He should then anoint his fingers with Oil or lard, and take a Chair at the side of the bed, and placing his fingers under the clothes, up in the vagina the —

descending, until the point of the finger reaches the orifice of the vagina, on the finger is to be drawn gently, or backwards, in the direction of the lower strata, until it reaches the os or presenting part.

If it is a presentation of the head the should feel for the fontanelles, and ascertain, and be guided in the direction with the different parts of the strata with which the are in contact. If the presentation be natural, this has happened, that the practitioner should stay in the room during the first stage, nor is it necessary that the patient should keep her bed. The patients bladder, and rectum should be attended to. She should be allowed to take any light food

efforts during the first stage, as the effort of bearing down begins.

Toward the end of the first stage the nurse should make the patient comfortable by placing a piece of oil silk over the mattress and over this a sheet and blanket folded, upon which the patient should be placed.

The patient should now undressed and put to bed, her lower garments should be drawn up above her hips, her weight should also be taken up above her hips and a petticoat should be fastened around her hips and lower extremities.

About this time the water breaks, and the headache felt in the pelvis.

The patient should be placed

on her left side, with her hips near the edge of the bed, with her legs flexed upon her thighs, and her thighs flexed upon the abdomen.

When the head is on the point of the perineum, the accoucheur should take his place by the side of the bed, and make an examination to see the position of the head and the cord.

There is two objects in view in supporting the perineum, the 1st is to empty just enough perineum to counteract that pressure within, and secondly, to prolong the curve of the thorax, and give the head a proper direction to be carried to the orifice of the vagina, and not through the perineum.

Prepare on the perineum should be made with the hands, the backs, or the hands, resting on the coccyx, and reaching forward towards the orifice of the vagina, as the hands sweep through to give the child a higher direction.

The right hand is the most convenient, as it allows the left to support the head, in its external prostitution, and carry the head forward, as the pains expell the body of the child.

The first thing to be done after the birth of the child, is to extract any mucous that may have accumulated in its mouth.

Then the hand should be placed on the abdomen, to ascertain if the uterus is contracted.

The child as soon as it is born inhales the vital fluid, the lungs are expanded, and and respiration is established. If the child be healthy, it will cry as soon as it is born.

As soon as respiration is established, and the pulsation in the umbilical cord has ceased, it should be tied about 2 or 3 inches from the body, and then divided with a sharp pair of scissors.

The nurse before washing the child, should anoint its body with sweet oil, and then wipe it off with a soft napkin, to remove the cheesy substance, with which the body is covered.

The child should then be washed with tepid water and soap, and the body wiped dry.

The navel string should not be dressed, and care taken to keep it in its place, until the child may be dressed.

The child should not be allowed to have a purgative, as the mother's milk for the first few days is sufficient.

After the birth of the child the uterus remains for a few minutes relaxed, but again contracts to expel the placenta, which is generally detached, and remains in the uterus.

If the placenta is detached, and remains in the uterus, the fingers should be passed into the vagina, the cord resting between the tips of the fingers, and gentle traction made on the cord, in the direction of the **upper** thigh.

If it remains and is not detached, grasping the abdomen to stimulate the uterus to expell it has been tried.

After the placenta is expelled, a warm napkin should be applied to the external parts, to absorb the discharges, and should be frequently removed, and the part bathed with tepid water.

The folded sheets and blanket should be removed, but the oil silk should remain, her night cap should now be drawn down, and the patient must keep perfectly quiet.

The Physician should see that every thing is right, but it is best for him to remain about an hour after delivery, for fear of hemorrhage.

I have thus far endeavored to describe Natural Labour, and its phenomena, and Management in as brief a manner as possible, as it is not expected, if one to enter into detail, this is a candidate only for University honors.

Most Respectfully.

Charles Walter

An
Inaugural Dissertation
on
Malaria.
Submitted to the examination
of the
Trustees, Regents and
Faculty of Physic
of the
University of Maryland
for the
Degree of M.D.
by
Uriah Tavitt
of
Maryland.

Malaria
Its Causes & Effects

To give a history of this peculiar agent, it becomes necessary to treat of it according to its various peculiarities, I shall therefore in the first place speak of it under two heads, First of the various agents necessary in its production, Secondly of its effects on the living body. Malaria though known, as may well be supposed, to all intra-tropical countries from earliest times. And spoken of so far back

as the time of Lancisi an Italian physician in a book published in 1695, De noxiis paludum effluviis, Nevertheless much difference of opinion exists at the present day as to its seat causes.

It is by some supposed to be a peculiar emanation from the earth's surface caused by a certain degree and continuation of heat and moisture, Whilst by others it is supposed to be the result of vegitable decomposition acted on by the same agents, heat and moisture.

Each class of writers seem equally sure of the correctness of their conclusions, and each bring strong circumstantial evidence to prove their various arguments,

When however we consider the amount of evidence on either side, and the various circumstances connected with malarious generation, We are inclined to agree with that set of writers, who say that malaria is a peculiar noxious emanation from the earth's surface, the result of vegitable decomposition acted on by a certain degree of heat & moisture

That vegitable decomposition is the principal source from which it is produced, is evident from its being most plentiful in those places where vegitable decay is most abundant, as at the outlets and borders of rivers and lakes. In the neighbourhood of large marshes, and in low wet lands generally.

It would seem that any circumstance capapable of effecting vegitable decomposition would favour the generation of the poison. For instance, when low lands covered with abundant vegitation are dammed up or submerged,

The draining of lakes and ponds, the cultivation of new and rich lands are fruitful sources of malaria. Because the vegetable matter there lying quiescent, when brought in contact with the heat of the sun decomposes and emits miasmatic effluvia,

The cause of malaria being most abundant in the latter part of summer or the begining of autumn, may be attributed to the abundance of vegetation then on the surface of the earth and at which time vegetation

having run its course is most likely to decay.

Of heat its exciting cause it seems to require a certain degree of intensity, seldom originating at a temperature below 60° F. And also a certain continuation of that intensity is necessary to the production of the poison. Hence malarious diseases seldom prevail beyond the 56th degree of latitude. Because though the heat of summer be high the warm season is short. Heat so requisite in the production of malaria, produces it more abundantly in proportion to its intensity,

For which reason we see miasmatic diseases increase in malignancy as we go from temperate to torid climates. Indeed so noxious is it in some torid countries that whole districts are rendered uninhabitable by it to either man or beast during the warmer seasons of the year. Moisture is necessary in the production of malaria but like heat is required in degree, certain amount being necessary, yet much of it acts as a preventative to the generation of this noxious agent.

Therefore we see these places most productive of the poison causing to evolve it after heavy falls of rain or when such lands are overflowed by high tides or other causes,

Amongst the peculiarities of malaria ~~we~~ its most striking is its affinity for moisture. And to this is ascribed the cause of its remaining so near the surface of the earth and not to its specific gravity as was supposed by some. One of the strongest proofs of this affinity is its inability to pass over large bodies of water,

which is illustrated in the crews of ships, who remain free from the effects of the poison so long as they remain on ship board, Even though they may be stationed on the most pestilential coasts, But who are attacked with malarious fever, should they remain on shore for any length of time especialy during a night, Water appears to possess the property of decomposing or retaining it, To this may be attributed the beneficial influence of high tides and long continued rains,

which dissolve or retain it until it is again evolved by the sun's heat, or sent up in the form of spray by agitation of the waters. Malaria generally inhabits low lands, and is carried away only by winds and fogs. It also remains near the surface of the earth, this peculiarity is strikingly shown by high hills in miasmatic districts, where malarious diseases being prevalent at their bases are seldom known to occur at their summits, An example of this is given in Mr. Watson's lectures.

a soldier on descending from the barracks on a hight to the lower grounds at night, was seized with furious delirium while standing sentry and expired in thirty hours after being carried up to his barracks. There is also a case related in which the inhabitants of the lower floors of a public building, in a malarious district, were all attacked with malarious fever, whilst those who occupied the rooms above escaped the disease.
Another of its peculiarities is, that it is most virulent at

night, This is generally well known by all the inhabitants of malarious districts, The day may be spent in such places with impunity, but it becomes unsafe to remain there after nightfall. The poison seeming to return with the returning dews & low temperature of evening. It has been seen from the statements of naval officers that whilst stationed off malarious coasts, the crew may remain on shore during the day with safety, But should they remain on shore during the night they are almost sure to catch the fever

Malaria is capable of being conveyed from its usual haunts by the winds. It is likely therefore of being conveyed from the spot where it was generated to places which might else be free from it and healthy. In which places the presence of miasmatic fevers can be attributed to no other cause. Indeed it may be seen at times moving in the form of cloud or vapour from one place to another, Which may account for the unhealthiness of residences situated to the lee of large marshes or other malarious districts.

For this reason we may assume
why the bank of a stream
in the direction of the or-
dinary winds is sometimes
more sickly than the opposite
bank though the latter
may be nearer the spot where
the cause originated.
Thick woods may be considered
an impediment to the pas-
sage of malaria, by attracting
it to and adhering it to
their foliage. Therefore they
serve as a protection to
neighborhoods in the vicin-
ity of large marshes.
The inhabitants of some mi-
asmatic countries seem to be
aware of this.

In the territory of Guiana where large trees abound, the settlers live fearlessly and without, close to the most pestiferous marshes, and to the leward of them, Provided a screen or wall of trees be interposed, This property of miasma was known to Lancisi, it may be seen that he addressed a remonstrance to the Pope of Rome against a project which was entertained of felling some woods near the pontine marshes, between them and the city, It is now considered dangerous to remain long in woods thus situated, during the unhealthy season.

A case is related by Dr. Joseph Parish of Philadelphia, in which a family previously in good health, was attacked by a violent and fatal fever apparently in consequence of having cut an avenue, for the sake of a more extensive view, through a wood which intervened between them and a large track of marsh. It is said by some that malaria is decomposed or deprived of its poisonous properties by fire, and this is given as a reason why miasmatic diseases are seen so seldom in the interior of large cities, though they may be found ~~and~~

and even invade their out-
skirts, It is to this protective
influence that soldiers in
camps may remain in ma-
larious districts with some
degree of safety,
The inhabitants of some parts
of our country being made
aware of this fact, use fires
in their houses as a pre-
ventative, during the sickly
season, though the tempe-
rature of the weather may
not require them,
The production of malaria is
prevented or in a great mea-
sure lessened by the advan-
cements of cultivation, It is
to this that the diminution,

of agues in this part of our country is chiefly attributable. The low wet lands have been drained and most of them brought under cultivation, by which rank vegitation is prevented, and water prevented from stagnating. It is said that certain aquatic plants prevent the generation of malaria, this anti-miasmatic property is ascribed in a great degree, by Mr Bartram of Batches to the Jussiena grandiflora, an aquatic plant growing abundantly in some of the United States, especially Louisiana.

I have thus far endeavoured to give an account in the first place of the various agents and circumstances necessary in the production of malaria, and secondly a brief history of some of its remarkable peculiarities, a knowledge of all which things of the utmost importance to the inhabitants of marshy districts, & specially to the practitioners of medicine in such places.

In the first place by knowing the sources from whence it originates, we prevent as far as lies in our power-

all things that favour the evolution of the poisonous agent, secondly from a knowledge of some of its peculiarities, we guard against exposure during those hours when the poison is most noxious, from others we are directed in the selection of situations for residences. I continue to enumerate the advantages to be derived from such information and to altogether unnecessary, Suffice it to say that any one possessed of the knowledge of the peculiarities of miasma is sufficiently instructed by nature to take advantage of them

of the precise nature of malaria nothing certain is known, its presence in any place being known only by its effects on the human system. The diseases most commonly produced by it are intermittent & remittent fevers, generally spoken of under the head of malarious fevers. These vary in malignancy according to the pernicious character of the poison. In some places so deadly as to cause death in a few days or even hours, in others so mild as not to prevent its victim from ordinary occupations.

these fevers are the extremes of the case, but usually it assumes a grade midway between the two. This is the case especially in most parts of the United States where malarious diseases prevail.

The most striking and characteristic morbid effect of miasmata are intermittent and remittent bilious fevers. They are also capable of producing diarrhœa, cholera, dysentery, and various hepatic and gastric diseases. The treatment of which belongs under another head.

An Inaugural Dissertation

on

Typhoid Fever

Submitted to the examination
of the
Provost, Regents & Faculty of Physic
in the
University of Maryland
for the
Degree of Doctor in Medicine
by

Edward Wm. Gay of
Maryland. February 4th 1853.

of the morbi

[illegible]

[illegible] cellular

[illegible]

other animal worms

I suppose to be more

extensively prevalent,

than of the worse than

[illegible] on [illegible]

[illegible]

as the means of recognizing

[illegible] Typhoid Fever a

[illegible]

[illegible]

[illegible]

older writers on Fevers,

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] Louis, Gerhard, and others

have given it the name [illegible]

[illegible]

[illegible]

[illegible] this fever by various

[illegible]

remittent and Bilious

Transition of Fever

but comes on a

to revert to similar

the precise time of his vomiting

Describe his feelings he has

headache sometimes

a general uneasiness without

what to refer it to. If he be

from 100 to 120 in the minute
[illegible] small and compressible,
[illegible]

[illegible] there is a pair

[illegible] conference of Diarrhoea is
[illegible] and when it is [illegible]
[illegible] very susceptible to the action
[illegible] carics. A characteristic symptom is
[illegible] at the nose. This is usually

[illegible] sometimes it is completely encrusted [illegible]

[illegible] a heat which is described as [illegible]

[illegible] there is a painful distention of the abdomen [illegible]

[illegible] an offensive smell [illegible]

[illegible] sometimes [illegible]

[illegible] day, when [illegible] more prominent - and other [illegible]

[illegible] the [illegible]

[illegible] some an [illegible]

We sometimes find

their appearance in small

or

transparent vesicle

becomes some days warmer

[illegible] or black soaring it is [illegible]

[illegible] water and [illegible]; dark [illegible] must

[illegible] bath and sometimes [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] unpleasant odour is [illegible] from

[illegible] with [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] ordinary [illegible]

[illegible] is [illegible] rough and [illegible]

[illegible] are [illegible]

[illegible] or [illegible]

[illegible] unfavourably. The tongue beam [illegible] would be down or [illegible] up and down. The [illegible] beam [illegible] rod. The plunger and [illegible]

~~[illegible] arrangement~~ Hence all [illegible] may occur. The [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] about the weare [illegible]

[illegible] at the same time warning them

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] cleaning off is always

[illegible] and symptoms occur which

[illegible] to be the result of disorganized

[illegible] intestinal canal, or of [illegible]

[illegible]

[illegible]

[illegible] may be [illegible] alone
[illegible] [illegible] [illegible] and
be [illegible] [illegible] [illegible] [illegible]
abdomen. [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
assuming a [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible]. [illegible] obstinate constipation and
constipation ensue — A complete
[illegible] of the [illegible] [illegible] [illegible]
which takes place usually in one or two
days — but is sometimes [illegible] [illegible] to
a week or more. The cause of these
symptoms is a perforation of the
alimentary canal, and the escape of
its contents into the cavity of the
abdomen, producing [illegible] [illegible]
peritonitis.

[illegible] [illegible] [illegible]
[illegible] mild as well as the most aggra-
vated cases. It occurs usually between
the 12th and 14th day —

[illegible] ratio of this [illegible] varies [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

[illegible] [illegible] or [illegible]

Tympanitis, [illegible] present [illegible] existent [illegible] proportion to the [illegible] violence of the disease [illegible] avail [illegible] [illegible] very much [illegible]

[illegible] prominent
[illegible] [illegible] [illegible] usually
in the front part of the head and return
the eye [illegible] or [illegible] after which
some [illegible] delirium [illegible]
[illegible] peculiar expression of countenance, is
[illegible] [illegible] at the
[illegible] time dullness of hearing. The
patient is hard to rouse and answers
[illegible] [illegible], if [illegible],
when roused I will complain that
he wants rest [illegible] sleep. [illegible] here is
more vigilance, restlessness. Delirium
appearing about the seventh or 8th day
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
indicating a want of power in the brain
rather than an increased action. But
in some instances it is violent & [illegible].
The patient [illegible] [illegible] [illegible] [illegible] [illegible]
bed and is with [illegible] restrained
It is not unfrequently hysterical producing
the most strange and [illegible] hallucinations

varieties and complications. The description already given will be found applicable to a large number of cases, but there are some others which present so few of the characteristic symptoms of cirrhosis of the liver as to almost elude detection even by the most [illegible]

In [illegible] instances there is a little fever, slight [illegible] in the morning, [illegible] or [illegible] [illegible] headache — and no other remarkable [illegible] [illegible] [illegible] [illegible] no other [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] which [illegible] [illegible] [illegible] [illegible] liver

[illegible] [illegible] [illegible] [illegible] liver and stomache are principally affected [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] which remain [illegible] [illegible]

Retention of Urine - though not always present, is common to Enteric fever. Owing to the adverse insensibility of the urinary organs and urine frequently accumulates sometimes to an enormous extent without much uneasiness - and sometimes there is danger that the bladder may be ruptured - unless attended to by the Physician with a proper distension of the bladder can be relieved by pressure

Coughing of blood is very rare to occur in the adult especially where blisters or irritating substances have been applied - also where the skin has been punctured above the bones of the hip, or on the upper surface shoulders, arms or neck -

Anatomical lesions. Lesions in the intestines will be seen after death in almost every part of the body - The lungs, liver stomach &c are seldom found organically diseased

The glands of Peyer are almost always found diseased [illegible] are [illegible] so [illegible] bowel disease; that it is now a standard rule of [illegible] as is the [illegible] complete. The mesenteric glands are also affected, in the same manner as are the glands of Peyer along the whole extent of the ileum, & sometimes in the colon. The lungs are frequently ulcerated, the spleen enlarged & softened, & the kidneys &c.

Diagnosis — The diagnosis of this disease is not easily made out, until seven or eight days have elapsed. Then we find enough of its symptoms developed to be generally accurate. The most frequent & first are the frequent tendency to delirium, dull heavy [illegible] expression of the face. [illegible] The above insidious [illegible] appearance of the [illegible] on the seventh or 8th day, the tongue also

the distinct of hearing the [illegible] pulse
of the abdomen and the [illegible] more
constipation &c. These symptoms are not
necessarily present in every case — and
enough many of them are [illegible]
generally and enough to make our
prognosis certain — This disease is most
apt to be confounded with bilious or
intermittent fever — but the latter may be
readily distinguished by the [illegible]
remission. In bilious vomiting, the [illegible]
[illegible] and the absence of the characteristic
symptoms of Enteric fever.

Typhus fever is frequently confounded
with Enteric. It can be distinguished
by the constitutional nature of the
eruption, which is more distinctly over
the body and extremities, & is more
and more permanent. It is preceded
upon they do not disappear. They are
also darker, and appear at an earlier
period — There is no hemorrhage from the

bowels, which is very common in Enteric fever, and in the latter there is generally tympanitis - In typhus the abdomen is flat, or sunken. We should not be hasty in making our diagnosis and prognosis only from the chart, in order to avoid mistakes.

Prognosis. Enteric or typhoid fever is generally considered a very serious and fatal disease, but the statistical reports of Drs Hill Burtell, and others, do not show that it is so extremely fatal, some make it average of deaths as low as one in twenty, others one in ten, while others make it one in three. The latter is perhaps the most accurate. It appears that some epidemics of Enteric fever are very mild, while others are very fatal and that it differs in a marked degree in different years. and however fatal this disease may be some, there are few serious diseases in which it exibits so

rapidly the convalescing in typhoid fever. We have no specific medicine or treatment by which we can cut short the disease. But the disease may be materially shortened and the pernicious prostration may generally be kept in a favorable termination. It appears that there are no symptoms so unfavorable, and scarcely any condition so low, that the patient may not recover. Therefore no case should be pronounced as desperate unless it be in articulo mortis. Even when there is perforation the case is not without hope. Yet there is no case so mild that we can pronounce it free from danger.

The symptoms which appear to be the most unfavorable are first and delirium — profound coma — difficult breathing — great prostration — extreme distention of the abdomen — hemorrhage from the bowels, involuntary evacuations ~~from the bowels~~

and extreme feebleness and frequency of the pulse. Sliding towards the foot of the bed. There is not one of these symptoms which has not been followed by a cure. When we find the fever becoming less frequent, the skin cool and moist – the secretion becoming more healthy the tongue moist & clean – and the patient becoming more conscious, we may announce the patient convalescent – Warning the friends of the risk that he may have a relapse.

Treatment As we have no means of arresting this disease in its course the treatment will necessarily be varied according to the surrounding circumstances and the symptoms which are present

If called to see a patient, and we suspected him to have Typhoid fever we should give him a mild cathartic of castor oil magnesia or some of the saline salts. The bowels being usually very susceptible it is wrong to force them

given in quite small but sufficient doses is shown by a number of

When much irritation exists castor oil with a few drops of laudanum will answer this purpose best. But if there is acidity of the stomach magnesia is best. If there were either of these indications we should give three or four drams of sulphate of Magnesia or Rochelle Salts.

The bowels should be kept open with the mildest laxatives: Should the bowels, after having been evacuated, be spontaneously inactive no laxative medicines should be used. When the stomach is too irritable to retain medicines, an enema may be administered, to evacuate the rectum. There should be mild purges in the advanced stages when tympanitis is a troublesome. Then turpentine may be added with advantage. The fat at first is a good constitution, and is of full and

plethoric habit, with a considerable degree of febrile excitement & cerebral irritation excitement, it would prove to bleed him from the arm to the amount of from ten to twenty ounces and repeat it if necessary twice or three times at intervals of one or two days. After seven days have elapsed it would not be proper. As the disease under consideration is generally very protracted, and has a strong tendency to debility, it is always necessary to sustain the strength of the patient that is the treatment recommended by some practitioners. But Dr. Smith is opposed to general bloodletting at the commencement of the disease, unless there is "uncommon pain in the head with great heat of the pain, and throbbing of the temporal arteries, great pain in the side &c, and fever, he says, that all powerful remedies, or measures, made use of in the early stage of the disease

are very liable to do harm, and those patients who are drugged in the beginning of the disease do not bear it so well in the latter stages. Cold water is recommended very highly by him - used externally to allay morbid heat of the surface, in diminishing thirst, and quieting restlessness and agitation - at the same time to let the patient drink freely of cold water as he may desire. Throughout the whole course of the disease. The manner of applying it externally is to uncover the patient and sprinkle the water all over him. and this to be repeated as often as ~~it is~~ consistent with the patients feelings. The directions for the patient if practicable, to be kept in a spacious room, the larger the better. This bed to be of straw or husks, (especially if it is warm to be brought out in the middle of the room - He should contrive to have a current of air pass over the bed by means

of doors and windows. In the warm season of the year the windows should be kept open morning and night. All the furniture should be removed except such articles as are requisite for the patients use. The windows should be darkened, or something opposed to the light, in such a way as to still admit the air. The room should be kept as quiet as possible, since noise is injurious and no more visitors should be admitted than are necessary to take care of the patient which will, if he is very sick, require the aid of more than one

4. The room should be carpeted and the floor washed with water. The bathing body should be cleansed every day with a sponge and warm water. If male is able be allowed to go to the room or be [illegible] [illegible] [illegible] [illegible] [illegible]

In advanced stages there is generally debility and Tonics & stimulants are indicated. Sometimes we have to resort to them at an early period. Mild stimulants should at first be used such as infusion of serpentaria to which may be added some sweet spirits of nitre &c As the case advances stronger stimulants are indicated such as Carbonate of ammonia brandy, wine whey, milk punch, opium where there is a [illegible] Turpentine has been recommended where there is much distension of the abdomen. Where there is a deficiency of secretion alteratives may be used such as blue mass from one to [illegible] grains every two or three hours until the gums are slightly affected. This does good by increasing the secretions and also as an antiphlogistic and in preventing disorganization. Iodide of potassium is a good drug in its acknowledged power to disease tumid glands it has a most excellent effect when given early in the disease.

but avoid [illegible] is [illegible] the irritating
the stomach and bowels is [illegible] use
The diet should be mild and nourishing, [illegible]
consistence [illegible] but [illegible] have
[illegible] much at a time [illegible]

An Inaugural Dissertation
on
Remittent Fever

Submitted to the examination
of the
Provost Regent and Faculty of Physic
of the
University of Maryland

For the Degree
of
Doctor of Medicine
by
M. S. McKinnon
of
York County
Penna.

Gentlemen

In accordance with the time honored rule of your Institution which exacts of every student applying for the degree of Doctor of Medicine a thesis of his own composition, I have undertaken to write upon Remittent Fever, and at the same time, I acknowledge my inability to do justice to the subject; it is my intention to use as much originality as possible. I shall refer to notes taken from the lectures delivered by our worthy Professor of Theory and Practice and the standard Authors on the subject. Should the Faculty detect errors in this thesis we hope they will view them with an eye of charity, as we professe merely to be in the dawning of that light to which so few have advanced to the Meridian

Among the many diseases which infest the human family, bringing sorrow suffering and distress in their wake; there are few which are more extensively prevalent in our country, and none that are more interesting to the inquiring student or the Philanthropic practitioner The field of study which it presents is almost unbounded, and the amount of benefit accruing to suffering humanity (since the modern improvements in its treatment) are nearly inappreciable

Remittent Fever is found prevailing in the neighborhood of marshy districts from the Gulf of Mexico to the northern lakes, but it is by far the more prevalent and more severe in its attacks in the Southern section of our country than in the northern and more

temperate region or clime. In the New England States it is of very rare occurrence. It is by no means however confined to the United States, being found in all tropical countries wherever there is combined the requisite constituents to engender the Marsh Miasma. The shores of the Mediteranean have been noted for the amount of sickness and death which have occurred to armies encamping in its vicinity. The African shores have also proved very fatal to Europeans visiting them.

It has been distinguished by a variety of names, none of which are strictly and perfectly applicable. The disease is probably best understood when it is called Remittent or bilious fever

But the first is exceptionable be-
-cause there are other diseases which
have remissions, the second is be
-cause yellow fever is as decidedly
bilious as the disease of which we
speak, it has also received names
from the Localities in which it pre
-vails, viz the Walcheren fever, the
Mediterranean fever et cetera, and
in this country it is often called
Cane fever, river fever &c, It
has also received names from
its determination to some par
-ticular organ, the Gastric, the
Hepatic &c, which are to be dep
-recated on account of its hiding
the true nature of the disease
Remittent Fever like Intermittent
(and they are essentially the same
disease) is very variable in the
manner in which it shows itself,
in some cases, it being difficult

to distinguish it from a case of 5th
intermittent and in others from
continued fever, and we have
every intermediate grade; The
types of this fever may be con
-sidered the same as those of In
-termittent Fevers, that which occurs
most frequently is the quotidian,
in which there is a paroxysm every
day, about the same hour and sim
-ilar in their general apearance.
The tertian also occurs, the par
-oxysms of which return every
other day, and sometimes the quar
-tan which is very rare, the second
in frequency is undoubtedly the
double tertian, a paroxysm occur
-ring every day, but the one on the
first day differing from that
occurring on the second day, in
point of time, or in severity, for instance
the patient may have on the first

day a paroxysm of considerable se-
-verity, on the second it will be mode-
-rately diminished or ameliorated, on
the third again it will be similar to
that of the first. There sometimes oc-
-curs a tertian type in which there
are two paroxysms on the first day
and none on the second, but this is
comparatively very rare.

The time of day when the first
paroxysm or exacerbation comes on is
various, the first chill coming on
at any period of the day, the subseq-
-uent exacerbations have a tendency
to follow in its footsteps and recur
at or near the same time, but the
remission generally takes place
in the morning and the exacerbation
at night.

There are generally recognised
three grades or varieties of remittent
fever. viz the simple the inflamatory

and the congestive or adynamic varieties. In the first the attack is mild, it runs its course regularly to a favourable termination in most cases, the second variety is that in which there is a predisposition to inflamation, the patient (generally in the prime of life) is plethoric and vigorous, the fever runs high, and there is constant danger of inflamation of some organ, the third variety is the reverse of this as regards the patient whose constitution is debilitated by previous disease or by exposure to inclement weather, or he is or has been subjected to the depressing influence of the weakening passions or mental emotions

Symptoms Under this head we intend to point out the symptoms which belong in common to the different varieties, cursorily noticing the points

of difference as we pass over them
A person about to have an attack of
remittent-fever will generally feel
dull, languid and listless with per
-haps pains in his head back and
lower extremities, which are generally
more uneasy sensations, but often am
-ounting to severe pain, he will feel
slight-sensations of chilliness al
-ternating with flushes of heat-the
ses symptoms will continue for
a day or two; In some cases however
the attack is sudden and without
warning, the patient will exper
-ience chilly sensations beginning
generally on the back, as if there
were streams of cold water running
down it; which increasing will gen
-erally amount to a complete rigor,
A slight-coolness of the extremities
is often apparent to the observer, the
face is generally pale, the pulse is

small, depressed, and sometimes irregular or intermittent; there is often nausea and vomiting, thirst; pain in the back and lower extremities. The duration of the chill varies from a few minutes to an hour or two, but it is rarely so severe as in ague.

The hot stage begins almost insensibly, the patient feels more comfortable as regards warmth, experiencing sensations of chilliness whenever he changes his position in bed. He soon however feels too warm, the clothes which cover him become oppressive, the skin becomes reddened full, tense, and shining, the pulse is now accelerated in frequency probably 90 to 100 in the minute, open and frank in its character. The tounge is usualy coated, but it is often slight. Thus early in the disease there is complete anorexia often amounting

to complete abhorrence of food, some-times there is nausea and vomiting, but this symptom is often absent. The patient is generally very thirsty, incessantly calling for water. The face is flushed, the eye suffused, Headache is a prominent accompaniment often causing a great deal of suffering to the patient, who is restless and wakeful, the sensation of muscular weakness is considerable, generally more than is real, for when frightened or from any other cause he leaves his bed with ease; these symptoms continue from 6 to 18 hours, when a slight perspiration breaks forth about the neck and face which increases until the whole body is covered with it, the skin becomes relaxed and soft, the patient feels much relieved, and often falls into a calm slumber from which he awakes refreshed and improved

the symptoms have all disappeared or 11th
are very much abated, This is a remi-
-ssion, which is variable in duration
but continues from 2 or 3 hours to a
whole day, the remission is seldom
so well marked as described above,
but always occurs to some extent at
least in this disease; After this ano
-ther exacerbation occurs, sometimes
commencing as the first with a chill
and ending with perspiration, but
often increasing in severity. If the
case be severe, the heat and dryness
of the skin is increased, the pulse be
-comes more accelerated in frequency
being often 120 or more in the minute
The respiration is somewhat hurried
The tongue is now coated with a thick
yellowish white fur, sometimes
dry and fissured in the middle,
As the disease advances it often
becomes brown, the lips also become

brown and occasionally sordes are found on the teeth, There is a tendency in some cases for the tongue to become dry during the exacerbation and moist during the remission.

Tenderness over the epigastrium is a common symptom, sometimes it is severe in the extreme, the mere touch of the fingers giving exquisite pain; this symptom is not often present at the beginning of the attack, but common about the 3rd or 4th day There is often a gnawing sensation sometimes a feeling of constriction across the epigastrium and at other times a burning pain, which are very anoying to the patient—

Nausea and vomiting although not present in every case, are sufficiently common to be regarded as an unpleasant symptom of the disease; The matters ejected are usually

of a dark greenish or yellowish hue and of a bitter sour and acrid taste

The irritability of the Stomach is sometimes so great as scarcely to admit of the administration of medicine and the nausea is sufficient in some cases to mitigate the pain in the head, depress the circulation, and relax the skin and cover it with slight cold perspiration

The bowels are commonly constipated in the onset of the attack and are generally supposed to be less easily acted upon by cathartics than at other times, this is disputed by some, but as the disease advances a bilious diarrhea often sets in and sometimes ends in dysenteric symptoms; Sometimes there is diarrhea from the beginning, and when this is accompanied by vomiting the disease sets in as it were in an attack of Cholera Morbus

The symptoms of remittent-fever are exceedingly numerous and the different appearances of different cases are so remarkable that they are apt to puzzle the young practitioner, its modes of attack are as variable as the forms of Proteus himself; In one case we will have a preponderance of nervous symptoms either arising from an inflamatory condition of the membranes of the brain, when we will have severe headache ringing in the ears intolerance of light, et-cetera, most prominent or inflamation of the parenchyma of the brain, when the prominent symptoms will be stupor and coma and sometimes paralysis

We have a set of cases in which the symptoms are very violent and dangerous and in which the patient often dies if not relieved by our art, death often supervening before the second

paroxysm; This variety is classified by some authors with intermittent-fever and as we have scarcely room in the bounds of an ordinary thesis, we will say very little about it. Again we have cases, which after commencing in the usual manner, pass into a typhoid condition about the 9th 10th or 11th days, the patient lies in a stupid and com-atose condition, for 2 or 3 weeks sometimes; Again we have cases which as-sume the typhoid character from from the beginning, probably from a depraved condition of the blood The disease has a tendency to terminate in favourable cases either, by declining perceptibly from some paroxysm or by some critical discharge viz diaphoresis diuresis or diarhoea, or by running into an intermittent; In unfavourable cases, the symptoms in crease in violence, the pulse becomes

more frequent and weaker, the extremities become cold, the breathing becomes stertorous, the countenance livid and hippocratic and the patient dies

Duration. The average duration of Remittent fever is about 14 days and its extremes reach from 5 or 6 days to 4 or 5 weeks, death sometimes occurs as soon as the third day, but this is rare

Anatomical characters. We have as yet no essential lesion in this disease, on which reliance can be placed however it is the opinion of some of the leading men in the profession, that the alteration of the liver, in which the reddish brown color peculiar to it in a state of health is changed to a bronzed or slate color; is a lesion essential to this disease. This has been distinctly described by Dr Stewartson of Philadelphia, since that time many

others have investigated the subject.
In the gastric Mucous Membrane the marks of inflamation are often present, it is generally found reddened thickened and sometimes Mamelonated
The intestines are also found the seat of inflamation in Many Cases, its Mucous Membrane being reddened and sometimes thickened and ulceration of Peyras eliptical glands have been detected, but in cases in which diagnosis from Typhoid was difficult - and might be attributable to error in diagnosis
The Spleen is generally enlarged and softened, it is sometimes enormously enlarged and pulpified, resembling Coagulated blood; Caution should be always in the examination of it lest disorganisation should take place and its structure be broken up.
The Brain too shows evidence of congestion and inflamation

The lungs are often congested and the heart softened; the blood in common cases is healthy at first, but after the disease has run on some time it often presents the buffy coat, probably from some local inflamation, but in low Typhoid cases the blood is sometimes black and uncoagulated

Cause: The essential cause appears now to be generally admitted to be the miasma arising from decomposing vegetable matter, there being necessary for its production a certain amount of heat and moisture

Diagnosis. Although sometimes difficult is often comparatively easy, we have for the establishment of our opinion some phenomena which are somewhat characteristic; 1st. the paroxysmal character and the disposition to begin and end in an intermittent - 2nd. the gastric irratability so common or rather prominent

in many cases 3rd the constant symptom of pain in the head 4th The evidences of excess of bilious production, shown in the vomiting and purging of bile, the yellowness of the skin and eyes and the jaundiced urine, all tend to point out the disease, the season of the year, the place where the disease may have been contracted, the exposure of the patient, and the length of time since such exposure, all materially aid in the diagnosis

Prognosis: This is generally favourable. The milder forms of the disease almost always terminate in recovery and the severest forms often yield to prompt and suitable treatment Simple cases are less dangerous than the inflamatory, those with distinct remissions than the continuous, and those connected with a sthenic state of the system than the low Typhous or Malignant

The danger is less in the acclimated than in the unacclimated, in the Negro than in the white, in the temperate than in the intemperate, in the young and vigorous than in the old and debilitated.

The signs of a favourable change are, a shorter or postponed paroxysm, a lengthened remission, the occurence of perspiration on the subsidence of the paroxysms, the tongue disposed to clean, the diminution of the frequency of the pulse, and abatement of headach, gastric irratability et cetera. Among the unfavourable signs are, great frequency of the pulse, coldness of the extremities, delirium or coma, subsultus tendinum, Hiccough, hemorhage from the bowels, involuntary evacuations, suppression of the urine, Hippocratic countenance &c

Treatment:- It is scarcely ever possible to see the case in the cold stage, but

if we should see it in this stage, diluent drinks and external warmth will in general be all that is necessary, but if the case be very severe sinapisms and friction may be used and some writers recommend opium, generally the Tinct. Opii, given in the dose of from 1 to 2 ʒ and repeated if necessary, is said to prove usefull But the stage of reaction soon comes on, it is then advisable to administer an emetic in some cases, this was once an almost universal rule, but has fallen into disuse, at least partialy, it is certainly usefull where the stomach contains irratating or acrid matters, which are indicated by oppression in the epigastric region, and there is nausea and retching to vomit or when the patient has been attacked soon after a hearty meal. In cases of this kind, an emetic of Ipecac aided by copious drinks of warm water or of warm Chamomile tea will be very

useful; but when there is reason to believe that gastritis has supervened, an emetic would be productive of harm rather than good. — A Cathartic is almost always beneficial, it unloads the intestines of their fecal or bilious contents, which if suffered to remain would prove a source of constant irritation, or where there is congestion of the liver or of the portal circle dependent upon it; depletion and derivation from the brain is also indicated, for these purposes, a full dose of Calomel, viz. x to xx grs is best suited to fulfill the indications, it agrees better with the stomach, and is best calculated to unload the portal circle and to purify the blood from biliary matter. It may be combined with rhubarb or jalap 8 or 10 grs of each being sufficient or it may be followed by an oz of Sulf Magnesia or a solution of Senna and Salts, if this should not operate, ℥ss of Oleum Ricini

may be given every 2 hours untill it operates, or purgative enemata may be resorted to with benefit; After the bowels have been thoroughly evacuated, it will be sufficient to keep them open with mild laxatives, one or two stools per day being all that is necessary throughout the disease.

Blood letting is another remedy of great value, but its use is restricted to a part only of the cases. it is most usefull in those sthenic and inflamatory cases, in which there is a tendency to local congestions and inflamations, which so often cause the death of the patient; here blood letting is our most efficient remedy, On the other hand it is contraindicated by marked debility, there is danger of prostrating the system below the point of reaction. In discriminating the cases in which the lancet may be indicated the practitioner

must be guided by the condition of the pulse and the symptoms of the case generally. And he must, in inflammatory cases particularly, keep a watchful eye upon the brain, the stomach and the liver, to combat inflamations of those organs in their incipiency. Local blood letting by means of cups and leeches may be practised with advantage, when venesection would be dangerous or unsafe.

After the administration of a cathartic and the lancet if required or indicated, the use of diaphoretics hold an important rank in the treatment of this and indeed all other fevers. They alleviate the suffering of the patient in a marked degree, the agents generally employed are, Ipecac, tartar emetic, the different preperations of Squill. Blue Mass may be advantageously combined with Ipecac and syrup of Squill

in small doses frequently repeated or alternated with 5 or 6 grs of Citrate of Potash which is a very usefull refrigerant, the effervescing draught is very usefull as a refrigerant and laxative, it is usefull in allaying gastric irritation, Tea and acidulated drinks are good for the same purpose and pleasant to the feelings of the patient, he may be allowed to take ice in his mouth, and let it slowly dissolve or powdered ice may be swallowed which generally proves very gratefull to the stomach, the feelings of the patient must always be consulted Solution of Acetate of Ammonia and the Neutral Mixture have been highly lauded by some and may be alternated with other diaphoretics and refrigerants, warm bath is also recommended and does no doubt prove highly usefull to relax the surface and produce diaphoresis especially in children

sponging the surface with cold water
of grateful to the feelings of the patient
is attended with very favourable results
But caution must be used in the emp
-loyment of this agent lest a remedy,
which when judiciously employed is
productive of much good, should be
come an agent powerfull in the pro
-duction of evil. the remedy should
be withheld whenever its application
produces chilliness or if there is per
-spiration on any part of the body. The
cold douche is highly recommended
by Dr Dickson, who thinks it a good
substitute for the lancet, but it requires
a great deal of caution in its employment
and cases of fatal prostration have
occured from its untimely employment
Mercury is an agent of great utility, it
has been in use for along time and still
receives the commendation almost
universally of the profession

But since the introduction of the great specific and antiperiodic Cinchona it is not universally customary to push this remedy in all cases to ptyalism but its great antiphlogistic properties make it extremely usefull in cases in which the lancet is contraindicated by a depressed condition of the system Again Mercury is usefull on account of its property of stimulating the liver carying off the bile with which the liver is loaded and otherwise depurating the blood, the administration of calomel or Blue Mass need not interfere with the other remedies, but may be given in combination with or alternated with them, small doses given at short intervals is the most plausible method of administration viz: to 1/10 gr taken every half hour acts very beneficiely in allaying irritation of the stomach, if there is much intestinal

irritation it should be combined with a
small portions of some preparation
of opium. This treatment should
be suspended at bed time, giving a
larger dose, for instance, 3gr Calomel
1gr Opium - 1gr Ipecac. if the Opium
is not contraindicated by determination
to the brain, and the Ipecac by gastric
irritation, under this treatment the
patient will often wake up next morn-
ing in a fine perspiration and much
refreshed by sleep, if ptyalism should
be induced, the remedy must be suspended
this event must be watched with care
Sulphate of Quinine; is becoming the all
important remedy of late years in peri-
odic fevers (particularly in the south) and its
use is applicable to almost all cases,
In the simple forms of the disease it may
be used without refference to previous
depletion, the dose and manner of ad
ministration must vary with the circumstances

If the remissions are prolracted, the doses 275
may be smaller, and equally divided
through the remissions. but if short the
the dose must be large in proportion
It will generally be advisable to give
from 18 to 24 grs during the remission
which will suffice in most cases in
preventing the next paroxysm, whenever
the full effects of the drug is obtained,
which is indicated by tinitus Aurium
and partial deafness, it will be unne-
-cessary to push the remedy farther
as it then exerts all the power it is
capable of producing under any circum-
-stances; In inflamatory cases it will
generally be prudent to deplete the system
by remedies already mentioned viz the
Lancet Mercury Cathartics et cetera,
because in this form the tendency to
local inflamation is considerable
and from the acknowledged therapeutic
action of quinine, a powerful tonic,

it would be a ticklish remedy, more particularly if there is any determination to the brain, on which it acts more powerfully. But the remedy is still more useful in those cases which are marked by the malignancy of their symptoms, where after one paroxysm it is uncertain whether the patient will ever survive another, in those cases, which occur most frequently in the South, Quinine is invaluable, It should be administered without loss of time, in large doses to prevent if possible a return of the paroxysm, for this is often our only hope for the rescue of the patient.

Again if the disease should run on unabated for more than 9 or 10 days it is apt to run into a Typhoid Condition. A Mercurial Course is here generally recommended and is usually productive of favourable results, two or three grs of Bene Mass may be given

every hour or two until the gums are affected slightly, if the bowels should be irritable, the Blue Mass may be combined with 1/6 or 1/8 gr of opium or 10 or 12 grs of Pulvis Doveri. If inflammation or ulceration of the intestinal mucous membrane should occur, which is by no means uncommon when the disease assumes this form Oil of turpentine may be given in small and repeated doses. this agent is highly extolled in these particular conditions in these cases and in all probability with justice

This state of affairs does not continue long before the use of stimulants become necessary to sustain the flagging powers of the system, Among the agents used for this purpose are Quinine and Serpentaria which stand preeminent among the tonics, the stimulants comprise Wine Brandy

Carbonate of Ammonia et Cetera, any of which may be used singly or may be alternated according to the circumstances and symptoms which present themselves to our view. External stimulation must not be overlooked. Hot-Bath Sinapisms to the extremities and over the epigastrium often prove usefull. Small doses of Opium or some of its preparations given at regular intervals are also usefull in allaying nervous irratability and usefull for its stimulating effects.

But there are complications which often supervene in the course of this disease which require the watchfull care and attention of the practitioner. The Stomach is often the seat of very considerable irratation and sometimes of inflamation, this is attended with severe retching and when anything is taken into the stomach by vomiting

A gentle emetic will often prove useful, which may be followed by warm diluent draughts of Chamomile tea or warm water, if the irritation be persistent, we may use sinapisms and blisters over the epigastrium and at the same time administer small doses of an opiate internally this will generally accomplish the purpose. If inflammation is present we must take blood from the arm if the strength of the patients system will bear it, we can generally make use of leeches duplicio and blisters, strict attention to diet must be scrupulously observed. Cathartics often give great relief.

Symptoms of disorder of the encephalon often make their appearance during the course of the disease in the first stages when the head is exceedingly hot and attended

with severe pain, the hair must be thinned or shaved off, bladders filled with pounded ice or clothes wet with very cold water, often give great relief. While cold is thus applied to the head, stimulating pediluvia to act as revulsives are indicated. Cups or leeches must be applied to the temples or nape of the neck. Blisters on the back of the neck or even over the entire scalp may be resorted to if delirium or coma be very urgent.

Inflammations are liable to occur in many parts of the system. They must be treated as cases of purely idiopathic inflammation of those organs. Morbid wakefulness must be met with opiates and anodynes.

Hiccough is sometimes a troublesome symptom and must be treated with antispasmodics viz. camphor

Assafoetida &c, Creasote is also said to act very promptly in this emergency. Some attention must be paid to the diet during the course of the disease. In the beginning and during the continuance of high vascular excitement, the anorexia accompanying it will prevent the patient from overindulgence but after convalescence has been established, the patients appetite is often very great, it always requires great care lest by some improper indulgence there may be occasional a relapse. Simple diet should be recommended and enforced by those substances which are easy of digestion and assimilation. The diet may be increased in quantity and as more nourishing and stimulating one added as the patient gains strength. He must be cautioned not to over exert his muscular system when weak & recovering

as it might be productive of much 306
mischief and greatly retard his convalescence. We have been humbly attempting to describe an important disease and to point out the therapeutic indications in relation to it. but we have only been able to touch the more prominent features of the malady which if minutely described would furnish matter for a volume. this we will leave for older and more scientific observers

An Inaugural Dissertation on Intermittent Fever.

Submitted to the examination of the Provost, Regents and Faculty of Medicine of the University of Maryland for the degree of Doctor in Medicine

By

Bernard Mills

of

Baltimore County

Maryland

Gentlemen

In compliance with the fourth clause of the statutes of the University of Maryland which renders it imperative upon every candidate for the degree of Doctor in Medicine the composition of a Thesis upon some subject connected with the Science of Medicine I present to your consideration this short and imperfect dissertation on

Intermittent Fever.

This disease is characterized by febrile paroxysms recurring at stated times and by the absence of fever between the paroxysms.

Of its peculiar nature little or nothing is known. Its cause seems to depend almost solely upon a peculiar emanation from decayed substances known as

Malaria. Yet other causes have been ascribed to its production such as temporary irritation for instance the introduction of an instrument into the urethra indigestible food taken into the stomach worms in the primae viae &c. But such cases are of very rare occurrence and the presumption is when we meet with a case of intermittent fever it is miasmatic

That malaria is the principal cause of its production seems now an established fact for the disease is rarely or never found except in malarious districts or in persons who have been in some way exposed to its influence

Those who live near or upon the banks of streams or marshes are more liable to the disease than others farther from the source of emanation.

That the poison may remain latent in the system for a greater or less length of time is clearly shown by the

fact that persons who having left malarious districts and removed far from its source of emanation have become effected. Instances of this may be seen every autumn among the students of this University

As the poison seems essential to the production of this disease so also do other causes seem to favour its action. It finds a more ready entrance during sleep or when exhausted from fatigue or hunger debilitated from previous disease or mental depression or any other cause which tends to lessen the vital action.

It not unfrequently lurks in the system without obvious effects for a longer or shorter time causing rather a predisposition to the disease. Under these circumstances any exciting cause may call the fever into action and an attack is produced which might otherwise have been avoided.

The time at which the disease makes its appearance after exposure is altogether indefinite. It may be in a few hours or not for weeks or months and some say it may remain in the system for a year or more.

Intermittent fever is most common in the latter half of summer and in autumn before the fall of severe frost. But it is not confined to this period entirely it may occur at any season of the year

The types of this disease are numerous. Those most frequently met with are the quotidian the tertian and quartan.

In the quotidian the paroxysms recur every day with an interval of twenty four the tertian every other day with an interval of forty eight hours and the quartan every third day with an interval of seventy two hours. Various other types are mentioned as the quintan sextan septan octan and nonan but they are of very

rare occurrence. I distinctly remember having seen a case of potinary intermittent fever in which the patient had a paroxysm every fifth day. The above mentioned varieties are liable to several diversities. The quotidian is sometimes double having two distinct paroxysms daily. The double tertian having two distinct paroxysms daily but occurring at different periods on succeeding days; the paroxysms of alternate days corresponding with each other exactly. The triple tertian having two paroxysms every third day and one on the intervening day that is three instead of one every forty eight hours.

The double quartan is that variety in which out of three days two have each one paroxysm and the other none.

The triple quartan is that in which there is a paroxysm every day but the three successive paroxysms differ from each other while the corresponding ones with

the three which follow. Other varieties are mentioned but are of very rare occurrence. The double tertian is the most frequent of all the varieties.

It not unfrequently happens that one type of this disease becomes converted into that of another by appearing earlier or later as the case may be. When the paroxysms appear earlier each day the disease is said to be anticipating when later retarding. Thus an anticipating quartan may become a tertian and an anticipating tertian may become a quotidian while a retarding quotidian is changed into a tertian and a retarding tertian into a quartan. So may an anticipating quotidian pass from an intermittent to a remittent fever

Simple intermittent fever if left to itself will often terminate favorably but not always. It may be and often is the starting point for many other diseases of

a more obstinate character. When an intermittent terminates favorably of its own accord if a quotidian it will terminate as early as the sixth or seventh paroxysm while other varieties go on proportionately longer. According to Forbes quotidians usually terminate spontaneously in about ten weeks tertians in four months and quartans in six or eight months. But they often go on for a much longer time if not cut short or interrupted by proper and appropriate means

The most frequent complications of this disease are those of the stomach and bowels liver lungs and the brain with its investing membrane.

All these inflammatory complications are most likely to occur in the young and vigorous. They are proportionately less often in the quotidian than the tertian in the tertian than the quartan

When the stomach is inflamed there is

an unusual degree of tenderness upon pressure in the epigastrium with burning pain with more than an ordinary degree of nausea and vomiting. Substances before acceptable to the stomach are now promptly rejected. Inflammation of the bowels is manifested by colicky pains in the abdomen with more or less tenderness upon pressure and by diarrhoea and dysenteric symptoms.

The liver may be the seat of inflammation when we find pain and tenderness upon pressure in the right hypochondrium difficulty of lying on the right side pain in the right shoulder nausea and vomiting disordered evacuations from the bowels yellowness of the skin conjunctiva and tongue and a deep brown colour of the urine. This inflammation occurs most frequent in the summer and autumn months.

The symptoms of thoracic inflammation

differ accordingly as the bronchial tubes the parenchyma of the lungs or the pleura is affected. In the first place we have all the symptoms of common catarrh present in the second cough with rusty sputa strongly very scanty and viscid and an obtuse pain in the chest in the third very acute pain in the side which is affected and is aggravated by a full inspiration.

Inflammation of the encephalon may be suspected when there is severe pain in the head and where there is a painful sensitiveness to light or sound added to a contracted pupil delirium &c.

Intermittent fever may be of three grades The simple inflammatory and malignant Of the two first I shall only speak. By the term simple intermittent I mean that which occurs without any complications whatever. It may be of a sthenic or asthenic or any grade between. The sthenic more closely resembles the inflammatory which

is to be described. The asthenic former are met with in persons who were previously debilitated by disease a want of proper nutriment fresh air &c. or at a period when an epidemic typhoid influence is prevailing. When of an asthenic nature there is an increased degree of depression in the chill a slow and uncertain reaction a feeble through frequent pulse with a dusky or purplish hue of the skin and a depraved state of the blood. It may be of a typhoid character in a more marked degree combined with a more than ordinary degree of dryness of the mouth the brown colour of the tongue the tendency to the production of sordes about the teeth the dusky hue of the surface and the greater frequency of nervous symptoms as subsultus tendinum jactation and low delirium.

Inflammatory intermittent is always associated with one or more inflamed organs. The inflammation seems to add a

degree of force to all the symptoms present. It may be severe enough to keep up febrile excitement after the paroxysms have subsided. In this way a complete intermission is prevented, but as the inflammation subsides the intermission becomes more perfect and the true character of the disease is more obvious.

When the inflammation is not of a grade to sustain the symptomatic fever the intermission may be complete so far as the frequency of the pulse and the heat of the skin are concerned but a more close examination will detect signs of local inflammation by the tenderness of the organ affected &c.

If an intermittent be speedily checked it will generally leave no unpleasant effects than a disposition to return. But if allowed to run on for any length of time many disagreeable effects ensue. The most common of these is enlargement of the spleen.

The spleen may be so enormously enlarged as to extend way down into the abdomen and occupy a considerable portion of that cavity. It is generally more or less indurated hence the popular name of ague cake in malarious districts.

The cause of this enlargement seems dependent partly upon the poison which gives rise to the intermittent and partly upon the blood which leaves the capillaries and becomes congested in the viscera especially the spleen which is intended probably as a diverticulum to prevent injuries to more important organs from irregularities of the circulation. This enlargement seems more frequent in the quartan than the tertian the tertian than the quotidian.

Another very frequent ill effect is that of dropsy. It seems dependent principally upon disease of the liver and spleen.

The veins of the abdominal and sometimes

all that portion drained by the branches of the ascending cava become congested in consequence of obstructions in the liver and spleen and relieve themselves by effusion. This kind of dropsy is hence of cure. Another cause has been attributed to a substitution of the serous discharge for the perspiration to which the system had been so long accustomed. But the dropsy in general is easy of cure.

The liver as before stated is often affected. It is often indurated and enlarged even when not sensible enlarged it is affected with chronic inflammation or derangement of its functions giving rise to jaundice dispepsia diarrhoea &c.

The appearance of a person labouring under chronic intermittent is very characteristic. He wears a sad and dejected countenance indication of depression of spirits he is pale and very sallow cold mile rise fills him with feelings of languor nausea weak-

ness and liable to fatigue upon the slight-
est exertion appetite lost tongue furred
the dejections clay coloured and the urine
dark brown as in jaundice

The symptoms of intermittent when
fully formed are quite regular consist
of three distinct stages the cold the hot the
sweating which succeed each other in the order
they are mentioned.

Usually before the cold stage we have
premonitory symptoms which warn us
of its approach. They are usually languor
lassitude weariness debility a total aver-
sion to all kinds of muscular exertion
with yawning stretching sighing and
depression of spirits. But these premon-
itory symptoms are not always present.
Sometimes the chill is ushered in
without any premonition whatever. Often
sometimes the second stage is present
without the patient having been aware
of the existence of the first

and it not unfrequently happens that the premonitory symptoms with slight pains in the head and back and some febrile reaction constitute the whole disease for several paroxysms

And again a patient may be attacked with all these symptoms so slight that they pass unheeded and is only reminded of their occurrence by succeeding attacks. Attention to these imperfectly formed symptoms is of the utmost importance as the disease may almost always be arrested and save the patient much inconvenience and discomfort.

Immediately after these premonitory symptoms in a well marked case the patient experiences chilly sensations especially in the limbs which soon spread through the whole system becoming exceedingly distressing. Very frequently the chilly sensations seem to run in longitudinal lines with a sensation not unlike that

of cold water trickling down or over the surface of the body. other are shivering and trembling wanting along with this. Rapid and successive shudders run through the frame, the teeth chatter sometimes loudly and the bed clothes are sometimes shaken from the bed by the violence of the paroxysm. The body often feels cold especially the extremities as the feet hands and cheeks. Sometimes the surface feels hotter than in health to the hand of the observer even when the patient experiences feelings of cold. Along with this sensation of coldness of the surface presents that rough appearance known as the cutis anserina; the features shrunken and contracted the countenance pale and the lips and the ends of the fingers livid.

The breathing is irregular and often hurried. There is a feeling of oppression in the epigastrium which causes often a short dry cough and sighing.

There is thirst though the tongue is moist all disposition for food is lost and occasionally there is nausea and vomiting. The rejection from the stomach is of a mucous or bilious matter.

The pulse is small though quickness and often irregular. The secretions are scanty except the urine which is pale limpid and copious.

Nor does the nervous system seem free from its effects. Independent of the rigors there is pain in the head back and loins of a neuralgic character.

The temper is not unfrequently irritable and the mind depressed and confused and sometimes wandering. Occasionally there is drowsiness and in some rare instances coma and even symptoms of apoplexy. The duration of this stage varies greatly on an average it lasts about six hours.

The passage from the cold to the hot

stage is not abrupt. The first sensations of heat are very variable. Rigors for a time alternate with flushes of heat; a glow is first felt about the face and temples and gradually the whole surface becomes hot. Even now should the patient lay a limb over the cold part of the bed sudden chills are felt which thrill through the whole frame. All traces of the chill at length disappear and leave the patient affected with burning heat. The temperature is increased the cheeks are flushed the eyes sparkle and the skin is redden-ed in consequence of the distended capilla-ries. The mouth too is dry and hot the tongue furred and the patient complains of great thirst though not invariably.

There is an unusual degree of pain in the head of a throbbing character also pain in the back and limbs. The pulse is frequent and strong. The respira-tion is accelerated.

There is occasionally nausea and vomiting with an utter disinclination to take food. The duration of this stage varies from two to eighteen hours or more.

The hot-stage having exhausted itself and beginning gradually to decline the sweating stage makes its appearance by the accumulation of moisture upon the surface which begins first upon the face then the hands and soon spreads over the whole surface. It is sometimes very slight and sometimes very copious. Upon its appearance the patient begins to feel some relief and the febrile symptoms begin to subside.

The chill becomes [illegible] excitement of the circulation begins to subside the nausea is moistened the headache disappears and the patient frequently falls into a calm sleep from which he awakes free from fever.

The secretion of the kidneys is again

resumed and the urine discharged usually deposits a lateritious sediment.

During the intermission or apyrexia the patient though free from fever is not clear of disease. Great languor and a feeling of fatigue, pain in the back, and an uneasy sensation in the head and epigastrium with a furred tongue and feeble appetite are usually present. Sometimes they are very slight and sometimes so great that in connection with the slight degree of fever or heat of the skin and frequency of the pulse as to render the intermission very imperfect. But they generally diminish as the disease advances and the patient becomes quite well during the intermission having not unfrequently the appetite the digestion and the general vigour but not the appearance of health.

The diagnosis of this disease is easy. The only diseases it is at all liable to be

compounded with an hectic and remittent fevers. From the first it may be distinguished by the irregularity in the recurrence of its paroxysms the comparative absence of head ache the excessive night sweats the clearer complexion and brighter eye and the hectic flush. From the latter by the continuance of the fever during the whole interval

The prognosis in uncomplicated cases without malignant tendency is almost always favorable. Inflammation of any of the vital organs will of course complicate the disease and give rise to danger.

The more complete the apyrexia the more readily will the disease yield to appropriate treatment. Of the different types as a general rule the quartan is the most difficult to cure and the tertian the easiest.

The treatment of this disease I shall not attempt to describe. The physician

is rarely if ever present during the pro-
ming or cold stage in simple intermittent
fever. If he be present during the pyrexia
stage he should administer such reme-
dies as have a tendency to cure the rig-
rigs and shorten the paroxysm. In order
to accomplish this opium gj or an
equivalent quantity of some one of its pre-
parations may be given or if there be
a sense of oppression in the epigastrium
with nausea ipecacuanha gtt XV–XX should
be given or if there be vomiting already
of acrid or billious matter the stomach
may be assisted by warm diluent drinks.
After the chill has set in the patient
should be wrapt up warm in bed and
such means employed as may be
most conducive to his comfort.
Artificial heat applied to the surface
by means of bottles of hot water bricks
heated and moistened and wrapped in
a flannel cloth applied to the surface

also bags of hot sand or bran are of signal benefit. When the chill is unusually protracted the hot-vapour bath may be employed with benefit. Warm teas such bran tea toast water hot-lemonade &c seem to exert an effect in bringing about reaction: When there is threatened prostration indicated by fainting, and a weak and almost absent pulse, stimulants and rubefacients become necessary to bring about reaction. Carbonate of ammonia and oil of turpentine and even sulph ether given internally, while the hot oil of turpentine vapour bath heated in brandy applied by friction to the surface with sinapisms to the inside of the thighs epigastrium and extremities

The use of the tourniquet has been very strongly recommended in intermittents as producing of great benefit.

But how it acts seems a mystery

except it produce its good effects by its impression upon the mind of the patient.

Bleeding too has had its advocates in the persons of Drs Macintosh Gairdner and others. But whatever may have been its efficacy with them it seems to have entirely failed with other very eminent physicians. Dr Chew having had a wide scope for observation adduces many instances which prove it to be an unreasonable practice, except in cases where there is a tendency to apoplexy evinced by stertorous breathing a suffused face and a slow and laboring pulse.

In the hot stage if there be a very high fever, full strong pulse and severe pain in the head or other parts leading you to suspect inflammation blood should be taken. And if the evidence be unequivocal of inflammation bleed without hesitation. But in ordinary

cases you need not do more than place your patient upon a refrigerant treatment: Cold drinks in moderation The effervescing draught given every hour or two is a grateful remedy in these cases It is not only very grateful to the patient but it soothes the stomach allays irritation and lessens the fever by promoting perspiration. When there is no irritability of the stomach its efficacy may be increased by the addition of a small quantity of tartar emetic But it should never be given so as to produce nausea. A good substitute when the effervescing draught cannot be had is the citrate of potash ~~or~~ dissolved in water

The application of cold to the surface by means of sponging is another very good remedy. It seems to relieve the febrile heat and tends to lessen the duration of the paroxysm. But it should only be used when the skin is very and hot.

In the sweating stage little else than preventing the exposure of your patient to cold is required.

The intermission is the proper time to address effectual remedies for the cure of this disease and happily the course to be pursued is as effectual as it is simple.

In ordinary cases the plan usually pursued is that of clearing out the bowels by a mild cathartic and followed in a few hours by the antiperiodic

The best cathartic as a general rule is calomel. It not only evacuates the bowels but also relieves the spasmed biliary It should be either combined with some other cathartic as rhubarb jalap scammony &c. or followed in six or eight hours by some one of the saline cathartics.

When the spasm is very short so as not to allow time for the action of the purgative it may be given during the paroxysm

or entirely omitted and the antiperiodic given in such doses that a sufficient quantity may be taken so to prevent the paroxysm.

In milder cases with no signs of hepatic derangement or bilious fever it will be sufficient to evacuate the bowels thoroughly by some one of the saline cathartics, or even this may be omitted and you proceed at once with the antiperiodic

Emetics are rarely useful except when there is great oppression of the stomach caused by undigestible food or acrid accumulations

Should the cathartics have been administered as soon as the bowels have been properly evacuated proceed at once with the antiperiodic. And above all and by far the most useful is the sulphate of quinine which should be given until its peculiar effects are made manifest.

by the hissing or roaring in the ears known as tinnitus aurium.

To produce this effect from two to four grains may be given every hour or two as the case may require.

A much larger quantity may be given if there be any reason to suspect the disease is of a malignant tendency. It may be given in form of pills or solution. When given in solution it is best prepared by the addition of one minim & a half of aromatic sulphuric acid to every grain of the sulph.

But I believe the pills as a general rule acts equally as promptly for it is readily soluble in the gastric juices.

It not unfrequently happens that from the high price of the sulphate of quinine the poor are unable to procure it or from the extreme bitterness of its taste it is utterly impossible to administer it to children. Happily for them and for us

its place is tolerably well supplied by arsenic whose cheapness and tasteleness render it admissible in both cases.

The best preparation of this minerals for administration is the liquor potassae arsenitis or Fowlers Solution. The dose of which is ten minims three times in a day equivalent to to one twelfth of a grain of arsenic. It is of the utmost importance that this drug be used with care. It should always be given on a full stomach.

Other preparations possessing antiperiodic virtues are often used with success.

Among these are Solicine ferrocyanuret of iron, Sulphate of copper Sulphate of zinc &c. although also the vegetable tonics and astringents have been employed in the treatment of this disease. Eupatorium has been much used.

Strong emotions of the mind often set a side the paroxysm.

Large blisters applied so as to be in full operation by the time of the expected paroxysm will often serve as a preventative. But such treatment is rarely resorted to when we have so many other milder and better means for preventing the occurrence of the paroxysms

After the paroxysms have been checked it will be to continue the use of the anti-periodics for some time to prevent its recurrence

Much more might be said concerning a disease of so much importance but for obvious reasons I deem it necessary to bring it to a close.

The Author.

c Ln

Inaugural Dissertation
On
Ulceration of the Os and Cervix Uteri.

Submitted to the Examinations
of the

Provost, Regents & Faculty of Physic
of the

University of Maryland
for the

Degree of Doctor of Medicine
by

David Ahl,

The subject which I have chosen as my thesis, is one that has engaged the particular attention of the profession for the last few years, and deservedly so in my opinion. The developments in regard to the more frequent existance of the disease than was formerly supposed and its subsequent treatment, have inspired some with wonder, others with incredulity and distrust. It is notorious to the profession, that the treatment of many diseases of the uterus has become almost an opprobrium to medical science. Every practitioner should be willing to examine any new theory concerning diseases, especially one that is calculated to throw light upon the treatment of some of the most intractable diseases in the art. There is yet much room for improvements in the treatment of uterine diseases

What definite or satisfactory treatment have we for prolapsus uteri? What certain remedy, or combination of remedies, have our best writers laid down for the treatment of severe cases of leucorrhœa, dysmenorrhœa &c.? Still writers do not agree on the same cause of origin. I am confident, there is no physician of ten years standing, having practice in these diseases, who has not had cases of the above mentioned maladies, that have proven rebellious to all the resources of his art; and the causes of which he could not account for, satisfactorily to himself. With regard to the alternative in the treatment of ulceration of the os and cervix uteri, instrumental examinations, I would only say "Honi soit qui mal y pense". It is presumed, that no honorable physician would pro-cure an instrumental examination, [illegible]

In detecting inflammatory ulceration of the os and cervix uteri great caution is to be observed. The lenght of the cervix varies much in different females, a fact which must be borne in mind in reference to the hypertrophy of the organ. The cervix uteri in a healthy condition is perfectly soft and downy, and rather greasy to the touch. There is no pain felt in the organ on pressure. Inflammatory ulceration generally commences in the mucous membrane of the cervix uteri. It often exists, without giving rise to local pain or uneasiness; and when pain exists, it is nearly always felt at a distance from the anatomical seat of morbid action, in perfectly healthy regions. The pain occasioned by inflammatory ulceration of the os and cervix uteri is seldom felt behind the pubis, but in one or both of the

ovarian regions; that in ninetien out of twenty cases it is in the left ovarian region alone. There is also pain in the back of a dull character. In some instances the pain is severe, incapacitating the patient for any exertion. The pain is uninterrupted except in the interval of the menses, or at perfect rest. The local pains have been mistaken for neuralgia of the uterus. The pains are generally in the lumbo-sacral, ovarian and hypogastric regions. There is often pain near the crest of the ilium, and also in the groin. These pains appear to result from pressure of the enlarged uterus upon the origin of nerves. The vaginal discharge is often tinged with blood; occurring more frequently after great exertion or coition. The quantity of blood that escapes is never large.

The size and structure of the uterus is frequently materially changed. The central structures of the cervix uteri is congested, and sometimes considerably enlarged and indurated. In virgins it is oftener indurated than enlarged. The ulceration may extend to the vagina. It has been known to exercise an influence upon the bladder and rectum. These three viscera being very intimately connected, it is almost impossible for one to be long diseased, without affecting the others. Irritability of the bladder, hemorrhoids and prolapsus ani are frequent complications of ulceration of the os and cervix uteri. The concomitant pains of these symptoms, have been considered as evidence of the existence of calculus or primary disease of these organs. The digestive organs have been supposed

to have been materially disturbed from the existance of this disease. Dr Barnes says that inflammatory ulceration of the cervix is also a common cause of hemorrhage during pregnancy; and that this fact offers an easy and natural explanation of the presumed menstruation of pregnant females. He says, in those pregnant for whom he has been consulted, on account of the presence of this phenomena, he has on examination nearly always found that the blood escaped from an ulceration of the uterine neck; the ulcerations during pregnancy being particularly turgid and exquisite. When pregnant females suffering from ulceration are examined instrumentally, the ulcerated surfaces often bleeds freely on the slightest touch; and in women in whom abortion or premature

confinement is induced by such disease, are very frequently found on inquiry, to have experienced repeated hemorrhagic flows during the pregnancy, which are often mistaken for menstrual periods. The menstrual molimen is also affected. There is great pain for the first day or two after its appearance, diminishing greatly, generally the discharge. The periodicity is also frequently influenced, by either returning too frequently or by being retarded in their appearance. It may also last much longer than in health or the time may be much shorter. The quantity of blood lost may be increased or diminished. Sometimes it is so great as to constitute flooding; at others so small as just to tinge the patients linen for a day or two.

The termination of this disease is generally favourable, unless it is connected with some necessarily fatal complication. If the disease has been recognized, and properly treated the prognosis may be considered generally favourable. The complete recovery is generally a slow process. The diagnosis is generally easy. It must be borne in mind, however, that it entirely rests with the physician. We are very seldom indeed called upon to treat the first stage of this disease, or in fact any disease of the uterus. False delicacy prevents the female from applying, and even when she does apply she generally makes her case as well on her side as possible. Women from a natural feeling of delicacy, require to be closely questioned with regard to uterine symptoms, seldom giving

any information concerning themselves of their own free will. They are by far more frequently called upon to treat the effects and inconveniences resulting from it, than for the primary attack. Thus Dr Whitehead says, that chronic inflammation and congestion of the cervix may exist for weeks and months, and perhaps until leucorrhoeal discharges or ulcerative inflammations take place, no advice is sought. The practitioner then too frequently treats the symptoms, and overlooks the original disease, or by his very treatment aggravates and confirms it. The bleeding ulcer has been confounded with cancer uteri. It is especially so, when the ulceration is combined with induration.

All the forms of ulceration are, possibly only different stages of the same diseased action. Lisfranc believes hysteria to proceed from irritation or slight inflammatory ulceration of the uterus, combined with nervous phenomena. He has always found the uterus of hysterical patients, whom he is very frequently called to visit, very tender to the touch, and in a state of turgescence combined with simple hypertrophy; the form and size of the cervix are such as it possesses at the second month of pregnancy. He also thinks that ulceration tends by its persistence to become cancerous

There is no doubt that dysmenorrhœa is occasioned by inflammatory ulceration of the os and cervix uteri. It may indeed be regarded as a symptom of ulceration. This state of the organ has a non-resisting tendency, and even causes contraction of the os and cervix uteri. The ways of transit, the os and cervix being contracted, nature is necessarily embarrassed in the exercise of her proper functions. A very indefinite idea of the cause of dysmenorrhœa is obtained from our best works on obstetrics. It has generally been treated as an independent disease. Dr Meigs in his valuable work on midwifery suggests its connection with inflammatory ulceration, as we see from his inquiry, "whether it is not highly probable that an inflammatory state of the organ is in some degree the cause of the unnatural appearance of the discharge. Leucorrhœa is also in my opinion connected with inflammatory ulceration. It may be considered as the result of primary inflammation of

the os and cervix uteri. Dr Barnett says that leucorrhœa is the secretion of the numerous mucous follicles which occupy the cervix uteri and besides also of the follicles existing in the upper part of the vagina when in a state of congestion. Dr Meigs admits that there are some cases of leucorrhœa to be met with that are dependent on an inflamed and sensitive condition of the os and cervix uteri. Dr Horner says the perfect removal of leucorrhœa will at all times be a difficult matter to secure; but much more so in cases of long standing, and where the discharge is acid. In these cases many disorders, such as prolapsus uteri, ulcerations of the organ, atrophy and dropsy are apt to take place. He admits that ulceration proceeds from leucorrhœa How few physicians have treated ulceration to cure leucorrhœa. It has been almost invariably as an independent disease, originating in the vaginal surface.

Under such considerations, the treatment (vaginal injections) has been too mild: not calculated to reach the fountain heads of the disease, the cervix uteri. Dr Simpson says that leucorrhœa depends almost invariably upon inflammatory ulceration and induration of the cervix uteri. He had found inflammation, enlargement and induration of the tissues of the cervix very frequent in practise, and existing, in fact in most cases of very chronic and aggravated leucorrhœa. In practise he had seen it mistaken for the induration and ulceration of carcinoma. The treatment of leucorrhœa heretofore, has been directed entirely against the chief symptom the discharge, without any investigation as to the possible cause of its continuance.
So my mind it is perfectly clear that abortion is more frequently the result of inflammatory ulceration, than of any other cause. Unless produced by direct violence, very few physicians will agree upon the same cause.

of abortion. I even know physicians of decided eminence in the profession, on being asked the cause of abortion in cases in their practice, said they did not know. Dr Tyler Smith admits that "ulceration of the os and cervix uteri, will, if continued excite reflex action of the uterus, terminating in the loss of the ovum". In ulceration of the os and cervix uteri, the uterine nerves are in a very sensitive condition This state of the organ is calculated to arrest the developement of the ovum; the foetus perhaps dies, becomes a foreign body, and the irritation which it produces together with the sensitive condition of the cervix uteri causes its expulsion. On the contrary abortion may be instrumental in producing ulceration Dr Bennett says that it may be considered as all but certain that inflammatory and ulcerative disease of the cervix exists when abortions quickly succeed one another, and when a female does not seem able to carry

the product of impregnation to the full term."
He also states as his decided conviction "that in a large proportion of instances, the serous inflammatory flooding and discharges which have been described by all writers as frequently following abortion especially when its occurs during the first stage or months of pregnancy, are, in reality, occasioned by the unrecognized existance of ulceration inflammation of the cervix uteri, itself the cause of the abortion. It occasions abortion either by reflex action or by giving rise to disease of the ovum or placenta or to uterine hemorrages.

Uterine polypi are a very frequent source of inflammatory ulceration. I have seen they keep up a continual irritation of the portion of the uterus with which they are in contact, producing central uneasiness, pains in the loins, groins and thighs, giving rise to a subacute or chronic inflammation of the cervix uteri, enlargement of its special glands sometimes hypertrophy with induration; and in most instances superficial ulceration. When ulceration is present the glutinous discharge is usually mixed with one of a mucopurulent color, and is occasionally streaked with blood. We has seen cases of keep ulceration of that organ that have been unquestionably produced by polypi. Very small polypi have been known to be accompanied with ulceration of the labia of the os uteri.

The immediate cause of the ulceration in these cases, the polypi, should be removed, and a cure will generally, but not invariably, be effected. Dr Montgomery has had cases of polypi producing ulceration and profuse menorrhagia, together with thickening of the cervix uteri. Polypi of the uterus, until very recently, have not been considered as a cause of ulceration. The serious attention of the profession has lately been directed towards polypi, as a cause of this serious disease. As a general thing they are very difficult to detect. If practitioners hand with the speculum will ensure success. They are almost invariably accompanied by increased vascular action in the cervix uteri, producing often ulceration and of necessity

bloody discharges, and a train of symptoms, which although perhaps so slight in their character individually as almost to escape observation, yet have the effect of insensibly damaging many of the most important functions of the economy, and of inducing a very miserable state of health. In the diagnosis of polypi in connection with ulceration too much caution cannot be observed, as serious consequences may result from a misconception of the true state of the organ. Cases are on records of extensive ulceration of the cervix uteri with prominent hypertrophy of the anterior lip of the os uteri, that were mistaken for polypi. If the abscess does not separate the lips of the os uteri, polypi are very difficult of detection.

On account of polypi being accompanied by ulceration and its concomitant pain and structural alteration, the symptoms are occasionally mistaken for those of carcinoma. This is more likely to happen if the examination is made just when a polypus of rather large size is passing through, but still engaged in and distending the os uteri. Sterility also sometimes proceeds from inflammatory ulceration of the os and cervix uteri. Dr Rigby denominates this the functional form of sterility. It depends upon a too contracted state of the os and cervix uteri. Dysmenorrhœa and amenorrhœa dependent upon ulceration, are generally the accompaniments of this form of sterility. Dr Bennett says "inflammatory ulceration occasions sterility, by modifying the vitality

of the uterus, and in some instances even closing the Fallopian tubes. That when the os uteri and cervical cavity are inflamed and ulcerated, the viscid muco-pus secreted closes the uterine cavity, and probably prevents the spermatozoa reaching the uterine cavity, where its presence is supposed by physiologists to be necessary for impregnation. Dr Raynard says the neck of the uterus is sometimes the seat of stricture; and that it may proceed from the healing of old ulcers. The modifications, which ulceration of the os and cervix uteri induce, could certainly be a cause of sterility. The serious disturbances which oftentimes take place, render menstruation and conception painful; and when occlusion is complete, impossible.

Prolapsus uteri has be supposed to proceed from the great increased weight and size of the uterus whilst under the inflammatory excitement. Observation has shown, that comparatively few indeed of those females who are affected with prolapsus, but have some other disease of the uterus. In a large majority of cases of prolapsus the cervix is invariably inflamed and congested. In complete prolapsus uteri hilcerations have frequently been met with; but were generally supposed to proceed from friction of the cervix against external objects.

Treatment.

In the treatment, slight ulceration may be overcome by vaginal injections. As a general rule, however, they do not reach the disease, unless it is situated at the os. This means may be used where an instrumental examination cannot be obtained. Rest in the recumbent position is demanded, as there then will be no pressure on the uterus. Beside, tepid baths may be used, and the general health must be attended to. During treatment, coition should be avoided, as it will only serve to retard, and even to defeat the cure. Hygienic means must not be neglected. A proper attention to diet will hasten considerably the cure. Fresh air, by carriage exercise or a gentle walk will do much towards improving the health, provided it does not bring pain or uneasiness

If the ulceration is of a mild form and not easily detected, wash over with a gr x solution of nitrate of silver, which will mark its outline. In addition injections by the assistant from the hips and inject a continuous stream for some minutes, by a gum-elastic syphon. Take away the polypus if small, by a speculum forceps, and then treat the ulceration secundum artem, by cauterization, emollient or astringent injections, hip baths, leeches to the cervix. Cauterization is the basis of treatment in inflammatory ulceration of the cervix. Nitrates of silver, acid nitrate of mercury, potassa fusa, and the actual cautery, are the principal means used for accomplishing this purpose. Other means have been used but apparently with less success. Dr Hill employs nitrate of silver, alternating with the

solid sulphate of copper or a strong solution of the diacetate of lead, or of the iodide of iron. Or in lieu if potassa fusa be introduced into the os and cervix uteri and turned from round, or be applied severely, as has lately been recommended, there must be a partial death of the parts, and a state of actual gangrene be induced; and that this injury can only be repaired by sloughing, ulceration, cicatrization and contraction of not complete closure of the cervix uteri. Dr Churchill uses iodine with much success. He usually commences with a single application of acid nitrate of mercury, and then after a few days he paints the entire cervix with the iodine. This is to be repeated once or twice a week. Dr Mitchell uses caustic in cicatrix, on the principal that it

forms a coherent covering to the ulcer, and permits the healing process to go on underneath undisturbed. The patient is placed upon her left side, the speculum is then introduced, and the ulcerated surfaces is then wiped dry with pieces of soft lint until adherent mucus is removed; then a camel's hair pencil dipped in the solution is to be rapidly applied to the ulcerated surfaces and allowed to dry, which will take place in a few minutes. Successive coats can thus be applied. It requires to be renewed in forty eight hours as the secretions detach it. In severe cases nitrate of silver, potassa fusa or acid nitrate of mercury substituted than the general solution. Dr Oldham employs the bichloride of mercury internally in ulceration. The doctor thinks that the injurious

of invariably injuring the secretory organs, with other formidable complications have been undeniable. He has found after the use of the nitrate paste, and the vienna paste, very copious hemorrhages come on when the eschars have separated, seriously impairing the patient's strenght, and requiring the best & astringent injections or applications to arrest them. He has seen cases in which the cervix uteri has been strictured by fibrous tissue; and adhesive inflamings and radiating cicatrices in the upper part of the vagina have, to his knowledge, resulted from the fluid escharotic escaping beneath the edge of the speculum which in spite of the greatest care will occasionally occur. Vienna paste has been highly recommended after ulcers of the os and cervix have been cured, and those

remains obstinate, pain, as shown by pain and weakness in the loins, a sensation of bearing down, etc. etc. admissible, then to apply the nitrate paste in such cases, is to mix it with a little water, and then smear it on a small piece of adhesive plaster; and this os uteri being exposed by a speculum to introduce the adhesive plaster, and paste it on the neck of the uterus by fixing up the speculum with cotton. The speculum is then withdrawn, when of course the vagina is left filled with raw cotton. Dr Whitehead treats what he calls the varicose ulcer, with leeches, local and bleeding from the arm, the recumbent posture, and three to five grs calomel with hyoscyamus or opium, followed by a saline cathartic. The local treatment consists in applying to the ulcer a strong solution of nitrate of silver;

which is to be changed after the acute symptoms have subsided, for the solid caustic. The discharge of blood is to be arrested by a strong solution of sulphate of zinc with vinum opii, and time of matico applied directly to the diseased surface. Gallic or tannic acid in solution, or incorporated with some ointment in the form of a vaginal suppository, have proved the most generally useful remedies for this purpose. Dr Kennedy treats ulcers, if little inflammation exists, with nitrate of silver, and mild astringent lotions in the interim, such as lead, zinc, copper, alum, decoctions of oak-bark and iodine washes; if inflammatory symptoms or irritation occur, by vegetable astringents, as tea of chamomile, poppy, or marsh mallow decoctions. Counter irritation by stimulating liniments,

and small blisters, and even bleeding and the lancet may be employed at intervals, if required, and alterative doses of mercury also, provided no scrofulous diathesis precludes the use of it. He has cured cases first by nitrate of silver, and the acid nitrate of mercury with Plummer's pill bark and gumme. In what he calls the bleeding ulcer he prefers the acid nitrate of mercury. He says we must not be deterred from the application of the caustic by bleeding, for unless freely used it is of little avail. A piece of lint should be put around the margin of the ulcer before each application of the caustic to absorb any that escapes, and prevent the adjoining healthy structures being injured. When the cauterization is completed, the passages should be freely washed

out with a continuous stream of water kept up for some time. The general treatment must be as varied as the circumstances of each particular case; sometimes antiphlogistic, at others tonic and occasionally a combination of both will be required. Everything likely to produce irritation or congestion of the parts must be avoided, that is, exposure to cold, or fatigue, stimulating food and drink, and sexual intercourse. Sometimes when cicatrization of an ulcer is nearly completed, aphtha appears upon its surface. This is to be treated by a weak solution of nitrate of silver, or a borax lotion, together with change of air. In using the potassa fusa a good plan is to pass a piece of wet or cotton well oiled, previously into the vagina, and allow it to remain

at the upper part of the passage, near the cervix uteri, so as to receive any drops that might fall. Dr Simson has cured cases with nitric acid. It was at the time supposed she had cancer uteri. He uses now the potassa fusa. He applies it through the speculum to the ulcerated and indurated tissues, and generally uses a piece three quarters of an inch long. If the induration is extensive, and the whole cannot be removed at once, increased action and absorption are set up in what remains, and the parts adjacent become softened and diminished in size. Absorption in this way was truly one of the results or consequences of inflammation. A large quantity of vinegar or water is immediately thrown up through the speculum, to neutralize the potassa and prevent

it injuring the sound parts. A copious purulent discharge usually follows for several days, requiring the use of astringent washes. An ulcer over an indurated part may be cicatrized; but it is almost certain to break out again and again until the induration itself is reduced. M. Jobert employs the actual cautery. He uses three kinds of cauteries, 1st the conical-shaped one 2nd, one with a flattened base or extremity; 3rd the annular. The surface of the cavity must be perfectly smooth, and when used to be heated to a white heat. It is kept in contact with the surface of the cervix one or two seconds. He always uses an iron speculum, as being a non conductor of heat. He appears to think that the actual cautery possess the greatest advantages

over all other escharotics; 1st, in the rapidity of its action; 2nd, in the power of regulating the amount of influence according to the effect wanted to be produced; 3rd, that it appears to have a more decided influence in melting down an hypertrophied cervix than any other application except the vienna paste; 4th, as a means of distinguishing malignant disease. In the treatment of ulcers that the acid nitrate of mercury, and the nitrates of silver are the most valuable of all the agents in treating this disease. Many modes of treatment have been proposed, but none have been adopted such as are in accordance with more severe cauteries, as the actual cautery. Between these two sometimes resulted disastrously, in some cases, giving rise to gangrene, sloughing, &c.

Nothing but extensive experience and a practiced hand could possibly warrant their employment. The acid nitrate of mercury upon application to the ulcerated surface, gives rise to a white eschar which does not fall off for four or five days. It should only be applied once in seven days. The nitrate of silver may be applied once in four or five days.

[illegible]

[illegible]

[illegible] University

[illegible]

of the Doctrine

[illegible]

[illegible]

[illegible]

The unwished for delay in the course of my medical studies has at last been terminated and it becomes necessary for me to give evidence of an acquaintance with facts, & knowledge of principles so intimately connected with that science which I propose to admire and to which I hope hereafter to be devoted; for truly the study of medicine cannot but be regarded as one of the noblest and most interesting pursuits that can engage the attention of the human mind. To contemplate the wonders of creation. To behold them as exhibited in the intricate structure & extraordinary mechanism of the human frame. To mark the changes which ensue at the various periods of life. To render by a diligent study of these phenomena, nature self tributary to the comfort & happiness of mankind. To relieve the pains & suffering of humanity. To restore the blooms to the cheek of pale disease. To dispel the gloom of disordered intellect and to resume the assaulted exhausted nature are surely the highest objects and noblest aims. The faculty of accomplishing these calls to the bar of an spiritual, pure and requires the possession of varied powerful talent. Let us see

concealed from ourselves the real difficulties which attend the acquisition of correct medical knowledge.

The history of medicine presently will view a singular picture of the pride and credulity of its professors; and an excellent writer has not unaptly conjectured that "a list of all the follies which, at different periods, have been established as articles of faith in medicine would form the strongest satire against the healing art". And so it is, that this has been the fate of medicine from the earliest times. For the philosophers of antiquity, it is proved, adopted the science of medicine. They received it from indiscriminate ignorance; but they precipitated it into a variety of hazardous conjectures: they delivered it over from the blindness of superstition, to all the rashness of doubt. The later researches, however, into the structure of the human body, its healthy and disordered conditions have done much towards discovering the errors of former times — and that, too, in the science upon a rational and certain basis. The study of a system is more easy

investigation of truth & its practical
[illegible] every difficulty
[illegible] would have to repose
which it believes itself entitled to substitute in the place of observation, &
[illegible] these have been diffused so
[illegible] exquisite, we are apt to look for
[illegible] cause of these evils, in frivolous
circumstances, & are always inclined
to consume the eternal laws, without
reflecting that these must always
[illegible] to our good.
[illegible] reflections have been called forth
by the labors of some, to whom medical
science is much indebted; of one who
deeply studied the Baconian
philosophy, which points out the only
[illegible] means of advancing the knowledge
[illegible] purposes of medicine, namely
practice founded on the observation
of nature and the infallible deductions
of certain and approved experience. Medicine cannot lay claim
to that degree of certainty which
belongs to mathematical sciences.
[illegible] doubts will remain, notwithstanding the most accurate views
[illegible]. With these facts before me
[illegible], Gentlemen, I in [illegible] choose
[illegible] for present investiga

time, I thought of none more fitted, or more satisfactory to you & qualify to myself than a review of the principles, contained & deductions resulting from that great discovery, the "Circulation of the Blood", which seem to have been left by Providence for itself to immortalize its founder, perhaps alone in the history of the world admirable writings, justly ranked to the orb of one of the greatest benefactors of mankind. The importance of inquiring into the structure & functions of the human system no one of the present day will for a moment deny yet few are to be found who have sufficient leisure from the more active pursuits of the profession, to obtain particular knowledge which is essential to the elucidation of general views connected with medical science. Nothing seems easier, more obvious, or more easily, readily understood, than the great and important function of the Heart. But amidst the darkness of Nature, it was involved in greatest obscurity & mixed up with a manner of contradictory ideas. And yet before his day many things had been made out: the pulmonary circulation

understood & several other important
ly had been established, still the great
principle had never been seen — so after
we on the very threshold of a discove
, which by some fatality we miss;
then it is at length made, how only
express our astonishment that we
re so unprovided, & blind, as to over
ok it — The same sagacity that introduced
duced to Optics & Astronomy, by his
ories of light & gravitation, Harvey
ferred upon treatment, physiology
medicine by his true doctrine of
"Circulation of the Blood."

[illegible] are few [illegible]; within the range of
physiological research which have
ed more attention than this one within
last two centuries — considered by itself
hart from the practical deductions which
low, it carries sufficient [illegible]
akem the curiosity of every inquiring
ind; but when taken in its way as a rela
to the actions & [illegible] of the different
parts of the animated structure, and
[illegible] & disturbances of vital
ions & living structure, which constitute
ease, we cannot overestimate its
[illegible] — When we trace the different
[illegible] & modifications of opinion, which we
[illegible] as a drawing the progress

of these researches, which from the earl[illegible] upon this subject have gr[illegible] led to a complete revolution of all t[illegible] phenomena of the circulation and to a satisfactory explanation of most, [illegible] pleased with the result and gratif[illegible] that so much has been reclaimed fr[illegible] error and ignorance, we are almost [illegible] ready to doubt whether reason is pr[illegible] gressive. When our minds become [illegible] absorbed in the discussions and controv[illegible] sies which have agitated professional [illegible] — when we dwell upon the ebb [illegible] flow of opinion as it has been through [illegible] writings and doctrines of rival tea[illegible] or contending schoolmen, a doubt [illegible] rises, as to the reality of the progre[illegible] ability of the inquiries — but when we [illegible] extend the scope of inquiry and lo[illegible] over the works of great generations, [illegible] the doubt is removed, and the real[illegible] of improvement becomes obvious. — It is now more than two centuries [illegible] Harvey gave to the world the result [illegible] of his inquiries into the Circulation [illegible] the Blood, and although he was [illegible] from the world with a [illegible] particular and cautious, peculiar [illegible] characteristic of the sound philosop[illegible] until reiterated experiments had [illegible]

-firmed his system and had included
in to demonstrate it in detail, and
advance every proof of it; to
which the subject is capable - But
was but ill received at all by, the
contemporary physicians, after it
announcing it, while the vulgar
believed it was crack-brained and
productive of a frenzie. But Co-
Truth crushed to Earth will rise again
The eternal years of God are hers;
But Error wounded writhes in pain,
And dies amid her worshippers, -
was it with the immortal produc-
of Harvey - In about twenty five
years after the publication of his
system, it was adopted by every one
and received in all the universities
the world - and Hobbes has aptly
observed, that Harvey was the only
chapes, that ever lived to see his
own doctrines established in his
lifetime -

Such at length became
reputation of this great man,
that he was welcomed to the Court,
and was appointed physician to
James First; and in 1632 to his
Charles First - before whom he
stated the principles of his great sys-

Fox upon the head of a dog.
Harvey was the pupil of Fabricius of Padua, the most renowned teacher of his times - with him he learned the principles of that science which his future life was destined to adorn. Of Fabricius it is true, did strike the existence and probability of the valves of the heart and veins but there he stopped. When Harvey took it up, he found a few detached facts relative to the blood and its movements, and they were obscured by much that was hypothetical - much that was merely erroneous.
But by constant toil and endless thought he discovered that the heart was the great central spring of the vascular system & from it the life current issued into the great arterial trunk and its myriad branches - thence through the capillaries - thence to the radicles of the veins - thence to the great venous trunks & finally back to the Heart. But this not altogether satisfactory, for Anatomy had taught him, that Heart of man was double & hence he pursued his investigations further and found that the blood passed

[illegible] the lungs, [illegible]
was distributed into the minute [illegible]
vessels and under each [illegible] to the
left ventricle from a [illegible] it [illegible]
to establish these facts was the
greatest object of the man who at
twenty six years devoted himself,
his talents and his means to the dis-
covery of this great truth. It has also
been found that the circulation of the
nutritive fluid has, as its object, the
conveying to every part of the organism
the materials for its growth and nour-
ishment - together with a supply of oxy-
gen which is required for its vital
action - and at the same time to
take the particles, which are set free
by the disintegration or waste of this
that the movement of the blood
through the arterial trunks and the
capillary tubes is in no [illegible] depend-
ent upon the action of the heart - there
can be no doubt whatever - but there
are residual phenomena which
clearly indicate that this is not the
whole truth. It may be observed
to continue for some time in bodies
that have been completely [illegible]
from the rest, and on which neither
a vis à tergo - nor a vis à fronte

[illegible] — It is said that the circle must be completed, the branches, to which the movement intervenient; in other words that the instruments in the act of nutrition and action are the real sources of the power. In the lowest animals the [illegible] circulating fluid seems independent of any central organ and in fact it is in Plants. Even in vertebrated animals we find the deficiency of central power over the peripheral circulation strongly indicated by some [illegible] the action of the Heart and its use in animal economy.

It was formerly supposed that the movements of the heart were dependent on its connection with the centres the cerebro-spinal nervous system — with the sympathetic system — experiments have proved that they be gradually removed without arresting these motions — they can only be accelerated or [illegible] its capability of being excited to movements of contraction [illegible] with relaxation — a property belonging to the organ itself [illegible] perfectly independent of everything else only retaining its accustomed stimulus

[illegible] to keep up this myth:
[illegible] action and when stretching
[illegible] they are found to follow
[illegible] each other with such rapidity
[illegible] it is hardly necessary for us to discuss
[illegible] course of the circulating fluid
[illegible] through the heart, nor to return to
[illegible] difference between, but will here re-
[illegible] consider the movements of the
[illegible] in the arteries & capillaries —
[illegible] find the vascular tubes are endowed
[illegible] certain inherent properties
[illegible] which are contractility and
[illegible]icity and tonicity. The two former
[illegible] movements exist in varying proportions
[illegible] in the different organs. The vascular
[illegible] system and tonicity has mostly
[illegible] elasticity, in the vessels
[illegible], which the circulated fluid
[illegible] work is made [illegible] and
[illegible], is mostly seen in the larger
[illegible] vessels near that organ, whereas
[illegible] contractility is most observable
[illegible] in smaller vessels, since it is
[illegible] to regulate the flow of
[illegible] towards particular organs.
[illegible] is however to be distinguished the
[illegible] tonicity, that the balance of
[illegible] — whilst it is to the material
[illegible] of the tonicity of vessels in the

contraction when the stream of blood [illegible]
and transmit it from [illegible], so that
the inter always will is true.
[illegible] in [illegible] manner
the contractility of the arteries is [illegible]
[illegible] the stream of blood [illegible]
[illegible] which [illegible] it can
be any general contraction of the [illegible]
[illegible] rather
assist the flow, but it is the alternate
fraction & relaxation of the middle or
coat which exerts a force supplementary
the heart impulse, relaxing to receive
[illegible] force in, & contracting, [illegible]
tents with a power superior to that [illegible]
[illegible] the inner impulse
[illegible] regulating the diameter of the tubes, in
[illegible] with the varying volume of [illegible]
ducted through them to any part.
We now come to consider the powers
[illegible] through the capillaries, [illegible]
that which concerns the agencies [illegible]
[illegible] to degree
back is more clearly proved than the [illegible]
[illegible] filling power, independent of
[illegible] in the lower classes of [illegible]
[illegible] Plants - and it may be as [illegible]
[illegible] movements of blood through the [illegible]

may continue after the excitation [illegible]
action - [illegible] case in protoculous organisms
in the heart is still acting rhythmically - [illegible]
[illegible] being [illegible]
[illegible] ity, [illegible] origination in the heart itself, [illegible] in no way affected by nerve [illegible]
a general principle in physiology. [illegible]
on the axiom - "Ubi stimulus, ibi fluxus"
that when there is any local excitement to the processes of nutrition, secretion &c. a [illegible]
[illegible] of blood takes place [illegible]
liver and the medulla of the [illegible]
is increased in rapidity - [illegible]
[illegible] the capillaries by their own power of contractility and dilatation [illegible]
distributive power over the [illegible]
[illegible] to local circulation, independently of the central organ, in obedience to the necessities of each part -
We will now turn to the [illegible]
nervous system - tracing its origin in the small branches that are [illegible] by the [illegible] of the capillaries and returning [illegible]
[illegible] structure of the nervous is [illegible]
the same with [illegible]
[illegible] the same [illegible]
vital properties of contractility and elasticity, but in a more [illegible]
degree - [illegible] contractility [illegible]

[illegible] is considerably greater than the arterial, hence the rapidity [illegible] movement of the blood in the veins is much less than in the arteries. [illegible] where [illegible] is given to prevent the reflux of blood and to [illegible] the resistance of the [illegible] against the force of [illegible] influence is so considerable [illegible] deficient. The movement of the blood through the veins, is without doubt, effected by the vis a tergo or impulse [illegible] which results from the action of the [illegible] in the capillary system.

There are some other secondary causes, however such as, the suction power of the heart acting as a [illegible] in drawing the blood towards it. Another inspiratory [illegible] has been found by some Physiologists [illegible] by movement. [illegible] from the blood [illegible] with the chest, in order to supply [illegible] which is created there by the movement of the lungs. The [illegible] hence the Respiratory [illegible] being since described by [illegible]. Bu

The most powerful of the general causes which influence the venous circulation is undoubtedly the powerfully exerting action of the muscles upon the veins. For in every movement the veins undergo compression, and as the blood is prevented by the valves from being drawn back it is necessarily forced onwards to the heart. We know also, that the pulsations are diminished in frequency, if not accelerated by exertion & very much increased by violent exertion. Hence we have now ascertained the general principles, in regard to the influence of the blood & not we find many & striking peculiarities still to be noticed. If there are two in the pulmonary circulation, the first peculiarity is that the venous blood is sent from the heart, through a vessel which is internal in its structure. The other peculiarity, that blood is returned to the heart, through a vessel whose entire character is that of a vein.

Another important modification of the circulation is that which takes place in the vessels of the brain. Nothing is more remarkable than the amount of blood contained & the forces exerted by the atmosphere, either keep the blood in the head, or force it out. In epileptic diseases, or in

curious modification of the [illegible] vascular system – the chief of these are the [illegible] cavernosa & the Clitoris, which [illegible] consist of a plexus of varicose veins [illegible] [illegible] contractile fibre [illegible] the contraction of these is [illegible] [illegible] the return of blood [illegible] which is the occasion of [illegible] [illegible] arteries being so [illegible] that even when the veins are [illegible] they are still [illegible]

Having now fully investigated this [illegible] [illegible] for us to consider the practical deductions which [illegible] necessarily resulted from so great discovery – Whence came the [illegible] of Inflammation, Congestion, and [illegible] [illegible] diseases to which mortality is an heir – & show the principles involved often form the most [illegible] symptoms in the Diagnosis [illegible] [illegible] the greatest benefactor of mankind [illegible] [illegible] will [illegible] medical [illegible] [illegible] no friend [illegible] must [illegible]

An
Inaugural Dissertation
on the
Phenomena of Pregnancy:
submitted to the
examination of the
Provost, Regents,
and
Faculty of Physic
of the
University of Maryland
for the degree of
Doctor in Medicine
by
James W. Wallace
of Penn.

1853

Sept. 81

To
Professors
Chew and Thomas
this thesis is
respectfully dedicated
by the
Author.

Were we possessed of a Wand, potent as that of the Witch of Endor, and as skillful to its successful craft, as was she in the Spirit visualized to the descending Saul, then might we presume to evoke a Something, which might be as yet Mysticae, from the oft and ill explored Labyrinth, of that noble Art, which has for its great Object, and design, the Preservation of health, the Repelling of Disease, and the mitigation, Relief and Cure of human Suffering, but unfortunately we are not thus inspired, we can invoke no such Magic Charm with which to penetrate as yet forbidden Chambers to scrutenize their secluded vaults,

and will forth the unknown, unseen existencies, from that Perennial Fount of ceaseless divulgement, whence thousands have drank so largely, and whose inmost recesses have been gleaned to their very depths, perchance that some new hypothesis might reveal, with which to intertwine the author's name, and reinkindle the disputing fires of the Medical Craft. Nor can we but feel that to assume the elimination of any new light, or theory upon a theme so pregnant in all its bearings and relations as the one we propose to discuss, would be but a work of supererogation, upon the part of one who as yet has scarcely trimmed his lamp with which to tread the cloudy meanderings of that obscure pathway, which if intelligently, and perseveringly pursued, must terminate in the effulgent sunshine of well directed aspirations.

Hence the task imposed upon all those who desire the degree of Doctor of Medicine, of preparing, and submitting to your consideration, a dissertation upon some topic, connected with the Science of Medicine, is to me, one of peculiar difficulty — leaving out of the consideration that all the exigencies, which intervene around, and connect the Student, in this premature era of his probationary course, are fully appreciated by those we address, and that with a full knowledge of the writers inexperience due allowance will be received for the sterility of this production, we shall proceed to the subject, and present before you those conclusions, deduced from the thoughts and examinations of others, which have appeared to us as the more rational, and better adapted as landmarks, to guide us in that discrimination and judgment

which is essential to the intelligent, and successful prosecution of this preeminent branch of our blessed and noble art — To decide with unerring precision the presence of a Fœtus in Utero, in its incipient, and primeval existance, or even during the earlier months of Utero Gestation, is most unquestionably without, and beyond the dominion of the most expert tactician, tis true that in a large proraality of cases wherein no motive or essay to concealment prevails, the circumspect, and well disciplined Obstetrician, may encounter but little difficulty in deducing correct conclusions, But unhappily there are many cases in which such impediments do interpose, and constitute impenetrable barriers to those who fain would surmount, and, (as there being The Physiological Phenomena presenting

during Utero Gestation evincing the existence of Pregnancy, are frequently so variable in their development, and most unfortunately so often generated by other and greatly diversified morbid changes, as to render it unsafe, and impolitic to receive them as absolutely Pathognomonic of any one certain condition, hence the presence of any one, or even a majority of those symptoms are of but trivial importance and wholly inconclusive without the concurrent evidence of all. — In the more advanced stages of Pregnancy, the signs upon which the Physician may base his decisions are of more tactile, and conclusive character — the Mystic types, and fleety shadows which the foregoing Pronounced Points Presignified the expanding Germ, have by its increased and continuous

development grows more robust, and formidable, and now expose a more tangible front, which may be grasped, and analyzed, if isolated and taken alone, irrespective of their concomitant follows, they may mislead, but grouped, and weighed in connection with their precursors they constitute infallible, and unmistakable evidence of the cause whence they emanate to lead those symptoms, to concentrate them, and accurately presage their procreative origin, and their consequent issue, it is an acquirement which every medical practitioner should indefatigably aim to command — to be able to determine positively the existence of Pregnancy in the married female is in most of cases probably of much less importance, than in the unmarried nor does it in a general way require

near the amount of lack and skill,
with the distrous married female cannot
no malice for imputing secret mis-
conduct, but on the contrary there is
often an anxious readiness manifes-
ted to impart a knowledge of their
suspicions, and situation to their
friends and medical advisers
not so uncommon with those whose
peculiar circumstances induce,
and call forth their every effort
and device to deceive, and mislead,
and these are the cases, unfor-
tunately where it becomes a mi-
atter of the greatest moment,
to investigate, and form a correct di-
agnosis, - the betrayed in silence,
the unfortunate, and the guilty, flee
resort to the Physician, as the im-
ploring balm with which to obli-
terate their shame, they come not
like Pirates as to the conquest of fel-

with their hands upon their mouths and their mouths in the dust, he spreadeth their diseased often him. But with deceit in their mouth, and the lie upon their tongue, assume altogether different qualities, with the design to procure in him that regard, which they dare not could not be obtained from any moral or medical man under any plea, or for any pecuniary consideration whatever, hence the necessity of a thorough acquaintance, and familiarity with those symptoms generated by pregnancy, and the strict examinations of all cases by the Physician conducing the demands of the Patient, in granting those remedies which the exigency of the case may require to them to importune. Summoned to investigate a case of doubtful Pregnancy, under either ordinary or

or extraordinary circumstances, the attention of the Physician will be first directed to the general condition of the Patient, and here the Phenomena presenting, and the information deducible therefrom, must to a great extent be qualified by a knowledge of the previous state and habits of the Patient, The vital fluid of an impregnated Female is generally increased in bulk, and accelerated, its impulse is quicker, and more full, and frequent, and if drawn from a vein, will most frequently present the buffed coat, consequent upon the increase of fibrine, the peculiar Tint of the Skin, its changed appearance, the morphew disseminated in blotches over its surface the Styes upon the Eyelids, and the dusky areola encircling those Orbs

all recourse to the experienced eye. Signs of more or less value, perverted appetency, longings for particular and unnatural articles of diet, alterations of temperament, and disposition often supervene, together with nervous derangement, and irritation of different organs variously situated, are all correlative: signs, which forebode the chance of Pregnancy, many of which are much more readily detected, after the existence of Pregnancy has been fully established, & have recognized as evidence by which to diagnose its presence; — fortunately however for the Credit of the Profession, and the satisfaction, honor and happiness of the Patient, there are more reliable symptoms, and more tangible departures from the normal condition, and appearances upon

which to base a diagnosis, I now take the Special Signs, and to these we will now recur, considering each one as they consecutively present in the progress of Uterine Gestation.

Cessation of the Catamenia

The non-appearance of this Evacuation in the Female, at the usual Periodical Season, Subsequent to Sexual Congress, Generally imparts strong Suspicion to her mind that conception has taken place, and if at the Proximate period it fails to reappear, it is then regarded as almost unequivocal Evidence, except in those cases, in which other morbid Phenomena are present, they to cause its cessation, from Valuable, and conclusive as this sign may be, as one of the Earliest, and most certain issues of Gestation

it cannot be regarded as decisive, inasmuch as the suspension of this discharge is often attributable to other causes, it may depend upon a general deficiency of the vital powers or an appreciable external or internal fixed irritation may thwart and contravene the natural tendency of the system to eliminate and sustain it. Exposure to cold, to freight, sudden emotions, to hot pots, or to dust, a chilly damp air often so operates on system as to produce a condition which forces to arrest the menstrual offices, an essential fiscus or organ being the subject of some flatent disorder, would in all probability interfere with this delicate depurative process. There is also evidence that this purifying function has been disturbed in many Jamaica females of peculiar constitu-

tutions, and adaptations in whom it has been properly and regularly performed. From its earliest appearance, up to the time of marriage, in these cases the menstrual flux has ceased immediately, and did not manifest itself again for several months, the sequence probably of irritation and excitement in the genital organs during the first sexual intercourse; in the meantime during this cessation, other symptoms of pregnancy have shown itself in the mammary glands, abdomen, and other parts. On the other hand we do not find this lunar emission universally suspended during utero-gestation. Instances are recorded in which it has continued regularly in some cases during the earlier months of gestation, and in others throughout its entire duration, this

however is a disputed point, and is by some positively denied. Negan totally rejects the truth of such statements, considering their opposition and implicitly declares that satisfactory proof is yet wanting of any woman ever having regularly menstruated during her term of gestation, he however admits the discharge of a sanguineous secretion, as having taken place at irregular intervals during that period, but denies its identity with the true menstruum of an unimpregnated female, it is abnormal Catamenia he holds can readily be distinguished from the genuine, by the quality of the blood, and by its quantity or diminution, on the other hand it is admitted that in some cases this analogous phenomenon does obtain during gestation, but that it is not applicable to many, and that there have been

a number of cases in which the true and real menstrual fluid has at regular periods continued its usual uninterrupted course, others again are reported to have commenced and menstruated regularly during active Gestation, who had, never given any evidence of its existence previous to impregnation — hence with these conflicting, and apparently inconsistent variations, it is evident that the suppression of the menses alone is not a sign sufficiently decisive, however valuable it may be when grouped with others, to justify the Physician in pronouncing a fœtus in utero.—

Nausea et Emesis,

Irritability of Stomach, accompanied with nausea, and disposition to eject its contents, is a frequent and cruel—

ality, a cogent indication of Pregnancy when occurring periodically, and in general instances under these circumstances it has been ascribed to the "Morning Sickness" but is now known, and appreciated by enlightened Community generally, if with the Suppression of the Catamenia, a Woman experiences on rising from her Couch in the Morning a Sense of Weight and pressure in the Gastric Region, together with a faintness and the most Sensation within the Bowels which is succeeded by vomiting, and thereby relieved, and finds that those troublesome, and distressing feelings continue to come with regular periodicity on a constituted period of time, She may in a very large Majority of instances conclude that those uncomfortable on the Result of Sympathetic transmission occa-

sioned by the presence of a tumor in Uterus.
This Gastric irritation obtains in various
stages of Gestation, with some it precedes
the apparent cessation of the Catamenia, taking place so immediately
after fecundation as to anticipate
the regular time for the change
to appear, but more generally it com-
mences from four to five or Six
weeks after Conception, and continues a variable length of time
as the case may be in different
individuals, this however is not
universally the case, some women
are entirely free from this disturbance for months after impregnation in whom it happens
in the course of the third and fourth
months, seldom occurring later,
with some it continues unabated
then ceases, and again happens
near the close of Gestation, again

it may be wholly absent, and yet Pregnancy exist, nor does it always prevail in the morning, it may and generally does subsiste immediately after meals when not in the morning, as it may in other cases happen very irregularly, and as unusual hours, with some it is only troublesome during the period of Pregnancy after the Patient has retired to rest, - its usual term of duration is usually from four to six weeks. but in rare cases it may continue throughout the entire period of Gestation, on the other hand it may depend on other causes than Pregnancy and recur as regular, and periodical as when generated by Pregnancy

Ptyalism

In the progress of Uterine Gestation it occasionally happens that the Salivary Glands become involved in the general sympathetic

irritation induces, and a more copious and abundant flow of Saliva is found. Fourth by these Secretory functions, this may obtain to a greater or less extent in various cases, in some it is scarcely appreciable, whilst in others it becomes so profuse as to be troublesome, this scattered salivation is however a more concomitant, but a frequent occurrence, this belief is strengthened by the fact of the earlier writers, as constituting one of the Signs of Pregnancy, and some of the more recent Obstetricians report cases in which it ceased itself, it is however so seldom present that it should be entirely overlooked by the Physician. When present however it presents none of those characteristics Pathognomonic of Mercurial Ptyalism, and consequently is most easily less viewed.

Alterations of the Phenomena.

Consonant to Mr. Montgomery the phenomena exhibited in these cases are conclusive evidence of the existence of Pregnancy, and by Auscultation, and Palpation the changes in the Aorta are considered fully as positive, now with all due deference for the intelligence and experience of these able, and learned Obstetricians. We cannot receive their conclusions upon this point as infallible, for however much value and importance may attach to them as correlative indications of gestation, yet we cannot regard any sign as absolute, "Pathognomonic of any certain condition which has been, and may be generated by a new cause, now it is a truth beyond controversy, that the enlargement of the

Mammæ, the secretion of a milky fluid, and the darkened areola, may all be present, and yet not depend upon Pregnancy. The enlargement of the Breasts may arise from various causes, such as the presence of a Polypus within, or the distention of the Uterus by Hydatids, with some Women in whom the Catamenia is suspended, the mammæ enlarge, and a fluid is secreted therein much resembling, at least, if not identical with that which accumulates during Pregnancy, "on the other hand Gardien and Mahon have remarked that when Menstruation takes place during the earlier months of Gestation, the swelling and pain of the Breasts are absent, and Dr. Montgomery mentions a case in which no alteration took place until after Delivery, in consequence of the

delicate state of the patient's health.
Hence we infer that if in the cases
of Gardien and Mahon the development of these changes were accompanied
by the continuance of the menses
during the earlier months of Gestation, that the like cause would
produce the like effects in the more
advanced stages, consequently we
may have exceptionable cases, in which
these signs would not be available.
Both in cases of constitutional
debility, and also when the menstrual flow obtains throughout
the entire period of Gestation,
again the accumulation of a milky fluid in the mammary
glands, although so universally
present, either in the earlier months,
or during the more advanced
periods of Pregnancy, furnishes no
positive or reliable testimony,

if it was never generated by other causes than Pregnancy, then it would be conclusive, but it does happen when a Fœtus is not in Utero, nor ever has been — for instance a case is narrated by Pandelogue of a girl only eight years of age, who suckled her breasts in the presence of the Royal Academy of Surgery in 1785 and Bellue another, now it is evident that in both these cases we have positive proof, that this condition was not the result of fecundation, in other instances we find the breasts enlarging, and a plain secretion at each period of the menstrual discharge, notwithstanding however these occasional variations, we must regard these changes in the hypogastric and adjacent parts as the most reliable

and conclusive signs of pregnancy in the earlier months of its existence. The attention of the female is first directed to the condition of the mammæ by experiencing therein a feeling of tightness and pulsation with slight shooting vibrating pains, the breast augment in volume, and fullness, and if compressed between the fingers feel as if they were composed of small irregular harmless moveable tumours, the areola around the nipples becomes shaded of a dusky hue, which gradually deepens in color, and in a short time a fluid is secreted in those glands, these phenomena generally occur about the end of the second month, in primipara cases, the peculiar shading of the areola is most pronounced, and noticeable than in

Succeeding pregnancies, yet after the integument surrounding the Nipples has once been changed, and modified by the presence of a Fœtus in Utero, it never again resumes its primitive state, hence in women who have borne children, this changed appearance cannot afford a conclusive criterion, in the third and fourth months the discoloration of the areola encircling the Nipple continues to increase, and by the middle of the first month generally presents a very clear hue, at this period a ring is formed around the Nipple varying from one inch, to one inch and a quarter in diameter, the intensity of its color is always consonant with the complexion of the Patient, prior to first conc-

gation the color of the nipple, and areola varies but little with that of the surrounding integument, in most of females it may be a shade or two deeper, and in some considerably darker, whilst in others it is scarcely appreciable. During gestation it is much more marked in those of a sallow skin, with black hair and dark eyes, than in those of fair complexion, light hair, and light or blue eyes; the nipple also becomes involved in the general change, and distended; it protrudes and is more conspicuous, whilst the areola immediately around its base presents an irregular, interrupted surface, occasioned by the infolding and the glandular follicles. In fairness, the skin covering these parts also appears more tumid, and moist, and somewhat bedewed with

a peculiar sensation at the same time there is scattered over the integument for some space around numerous small variegated patches of a nebulous hue displaying "fimbriated" edges the appearance as if the color had been discharged by a shower of drops falling upon the parts.

Abdominal Developments.

The multiplicity of circumstances which may produce the expansion of the abdominal parietes renders it exceedingly difficult to attach much valuable diagnostic information therefrom, especially during the earlier months of pregnancy. Cases are of frequent occurrence in which this condition of distension precedes the consequence of the uterus being inflated with gas or expanded with fluid or fungosities, when such is the case the seeming of the enlargement

like present similarity to those produced by a Fœtus in Utero. Hence in those instances, when the history and circumstances of the case are not available, the Physician will find his position one of considerable embarrassment. During Gestation, as the change in the form, and the extent of the tumour will always coincide with the advanced period of its duration, commencing from the foundation to enlarge, the abdomen is first swelled out by the accumulation of Gas in the intestinal cavity, which tumour soon begins to diminish, and by the end of the sixth, or seventh month has entirely disappeared, hence we generally find the woman less by the stage the second month, than in the previous months; in cases however where this transient distension does not minister itself, the abdomen will in the point

stage be smaller and more flat. Thus when in an unimpregnated condition, the consequence of the uterus gravitating towards the lower portion of the pelvic excavation, about the end of the second month it again rises and is perceptible immediately above the symphysis pubis in the median line generally but occasionally to left or right, from this data the uterine volume steadily enlarges and if examined by palpation subsequent to the fourth month, if the abdominal walls be not too thick or tense, an ovoid tumour of fleshy consistance, and definable form, can be recognised. Which is at first quite resistant, but subsequently as gestation progresses, becomes more pliable, and is peculiarly to have been by being circumscribed in extent and somewhat elastic to the touch, particularly if pressed upon in the later stages.

will be found the non-existence of apparently disconnected parts which may be moved about as distinct similar to those of the body enclosed within a dense, tense bilocular bladder will be recognised as parts of the enclosed fetus, the head, arms, or lower extremities. The signs elicited by percussion are of considerable movement. When the abdomen is distended by the expanding uterus, the resonance will seem to dull over every part occupied by the developing fetus. Caution is however required in interpreting the certain observations, not to be misled by dullness over the Hypogrium, on the one hand, nor by too clear resonance on the other, — the former in some cases may be caused by bad constipation, flatulence or by some other pathological phenomena, whilst the latter may be produced by some folds of the intestine being interposed

between the rectiae rolls, and above of the uterus by which the mass may be pushed inwards, or upwards towards the umbilicus, thus giving a clear lumen over nearly the entire hypogastric region. When the expanding volume has reached the umbilicus, that depression which at first seemed sunken and apparently drawn backwards and downwards, is now pushed upwards and outwards, and by the end of the seventh month, is generally level with the adjacent parts, and in some women the line is considerably dilated, thenceforth it projects and soon forms a prominence, by the termination of the eighth or the beginning of the ninth month, the tumour will have reached the ensiform cartilage, where it remains for a time stationary, towards

the close of gestation it commences to retrograde towards the Pelvis, and thus causes greater lateral extension of the abdomen. This appreciable subsidence generally precedes the accouchement from ten days to two weeks, and may be regarded as a certain prelude to approaching Parturition.—

Foetal Motion

The anticipation of an expectant Mother is generally gratified, by the sudden occurrence of involuntary action in the uterine region, foreconceived, and established opinion was in all cases induced the weaker, and yet stronger sex, of the great family of humanity, the anxiously awaits and often hails with joy, the first, grand, and conclusive premonitory presignifier that critical, yet happy moment, when all her pains and sorrows

will be forgotten, and swallowed up in the joyous emotions of the blessing Babe. The usual period in which this sensation is experienced is about the fifth month of gestation. It is however not definite time, happening in some Women sooner, and in others later. When first experienced it is exceedingly feeble, and almost inappreciable to a Mother, it however in some instances associated with nausea irritation, faintness, and sinking, gradually it assumes more force, and the movements becomes more frequent as gestation progresses, the Fundus, and Pelvic extremities can be distinguished by transmitted blows at different points of the abdomen, produced by the struggling Infant, these movements at

first are represented as producing a kind of titillations, or rather a sensation corresponding to that caused by the claws of an insect passing over the body, by degrees they become more perceptible, until the feeling experienced at times is that of a body revolving within of living strength from within, the as it were implement directed in quick succession to various points of the central parieties, they can be recognized by the physician, placing his hand, flat over the uterine globe, and pressing on abdominal walls in contact with the uterus, the bowels, when slight and difficult to perceive, the application of ice, or the hand immersed in cold water and applied quickly to the

to the abdomen, will by the rapid change of temperature, probably produce a more violent muscular contraction of the fœtus, and thus afford more decisive evidence;- extreme caution is however necessary in forming a diagnosis, even in this pre-eminent sign, not to deceive our own senses, nor to be influenced, and misled by the declarations of the patient. A sufficient reason for this precaution is that many females, for peculiar reasons command all their powers, to simulate this condition, and that many eminent accoucheurs have themselves committed this error.

Ballottement

As gestation progresses, the task of determining its existence, becomes more and more easy, the alterations

and changes, in the Mother's System become more conspicuous, and the abstruse Phenomena which almost bade defiance to the Skill of the most expert, is now comparatively easy to comprehend, Signs have now available, the presence of which enables the Physician to pronounce positively in relation to the existence, or non existence of Pregnancy; let the period of the fifth, or during the three proximate months, the Fœtus being enclosed within the Liquor Amnii, will by its own inherent weight gravitate towards the Os Uteri, and can be there recognised by a Vaginal exploration. The "Modus Operandi" in making this examination is, to desire the Patient to assume the crest position; and having made the necessary arrangements, the Operator will take his position in front of the

Lady, with one knee upon the floor, or something prepared for that purpose. So that his position will be easy, and his whole attention directed to the subject, one hand will be placed upon the abdomen for the purpose of retaining the Uterus, in situ; whilst the index finger of the other hand, will be introduced per vagina, in a vertical direction, with the palmar surface looking upwards, when the digital extremity has reached the Cervix Uteri, and recognised it, it should be withdrawn and placed anterior to it, or carried further and placed posterior to the Cervix, the advantage gained by this position, is that you will thus bring it in closer apposition to the Uterine walls, and consequently nearer the most depending portion of the Fœtus, - if placed upon the Cervix you will have the whole

length of the mass intervening between your finger and the vertex which will prevent you to a very great extent from perceiving and appreciating the descent of the displaced body, when arranged as we have premised, a sudden sharp impulse must be given the uterus, by quickly flexing the inserted finger upwards and inwards, by this the fœtus being free and movable in the amniotic liquid will be driven upward, and will quickly fall back upon the point whence the propelling shock was given — the finger should be held firm and steady after giving the blow, so as to receive and recognise the descent of the falling body, — if the beginner should fail in making his first examination, to obtain this legitimate motion, the application should be repeated for several successive times,

in relation to the decisiveness of this sign, we fully endorse the opinion of Dr. Montgomery, he says "should this be distinctly felt, it is proof positive of a Fœtus in Utero, there being no other condition or disease of the Organ in which a solid body can be felt in this way floating in the Cavity" " " " " "

Bruit de Soufflet

The Uterus is an exceedingly vascular Organ, and towards the close of Pregnancy exhibits an astonishing development of its vascular system, as the Uterus expands, and accommodates itself to the unfolding body within it. Vessels gradually ramify throughout the substance of the Uterus also partake in the general modification and grow larger, as the womb enlarges the Calibre of the Arteries supplying that Organ are increased and the impulse

of the circulating fluid cannot be readily computed by stethoscopic investigations. It is yet a contested point at what precise period of gestation this sign becomes available. Some assert that they have detected it at the third month, others sooner, but the general received opinion is that it may be recognized in the fourth month, or as soon as the womb has risen sufficiently above the pelvis to become accessible to the stethoscope. May not this apparent variation depend upon the condition of the mothers abdomen, the amount of adipose matter intervening between the stethoscope and the uterine walls, by which the fainter sounds of the earlier months may be obtunded, whilst the stronger ones of the more advanced months will pass through and be perceptible

this sound is identified by and distinguished from the Bruit du Cœur, by its being isochronous with the maternal pulse.

Bruit du Cœur

To the diagnostician the detection, and appreciation of the fœtal pulsation is the grand and conclusive proof of its life and presence it being "equally free from imitation or evasion" this sound is isolated, and peculiar to itself, widely differing from all others, It has been represented to the ticking of a muffled Watch, or the pulsation of a new born child, the only likely circumstances with which it might be confounded, would be the maternal circulation, from this it is however readily discriminated by the frequency of its pulsations being about double that of an adult, Chaussier asserts that in 100 cases, noticed by him

the average pulsation was 150 in a minute, the period at which this pathognomonic sign can be clearly detected, is from the middle of the second month to the birth of the child; provided in all cases the fœtus be living, some have received it sooner, but these are exceptionally rare. The region in which this sign is most ordinarily obtained, is on the anterior inferior lateral walls, it may however be distinguished at different points according as the fœtus is located within the cavity, in certain cases it may be recognized over a large surface of the abdomen, but can always be traced and circumscribed to a given point, whence the Bruit is more clear and distinct. This is best accomplished by directing the stethoscope of its mouth piece well towards noticing the increase of sound as you

approach towards, and the decrease as you
diverge from a certain point.

Situations of Luna & Lucina

In the progress of this discussion we have
external organs of generative quality
a peculiar characteristic change
needed more favorable range for
ovulation is obtained. These organs are
abundantly supplied with blood vessels
which multiply into interface almost
"ad infinitum" and being intimately
associated with the uterus partake
in the general congestion and dilatation
of that organ consequent to fecundation,
for the uterine blood vessels
constitute an impediment to the return
of blood from these parts, and thus in the
lower animals promotes congestion and subsequent
dilatation of their vessels, first to their
excitement, inviting a more copious and
active arterial flow to those parts and
secondly, substituting a mechanical

Obstruction to egress of venous blood, hence we find by examination during pregnancy, that the mucous membrane of the [illegible] during the secretion stage. Its tissue in which they are in the unimpregnate state, exhibit a more violet tinge, with numerous little spots, or discoloration which resemble the lees of wine, the result of the capillary circulation being congested. The veins are varicose and purpled, and the arteries are often sufficiently dilated to cause pulsation, this abnormal condition of the vessels of vagina we certainly consider of considerable moment, and when available afford much aid to practitioner in forming his diagnosis.

Modifications of Urine

Another valuable coincident sign of considerable importance to the Physician is the changes exhibited in the urine of an

impregnated Female. this is received in Glass Jar, and exposed to the light and air. soon assumes a marked change, when first voided it is less colored than usual, and of a blue milky shade, the odor is highly acidulous, and mouse-like. after exposure for one or two days a white sediment is deposited which adheres to the sides and bottom of the vessel, as this alteration is effected the urine loses it peculiar white shadowy hue, and becomes more clear and translucent, "from the second to the eighth day, small opaque bodies are seen rising from the bottom to the surface of the urine, and then collecting together until they form a layer, covering the whole surface; this is Heistein, It is sufficiently consistent to be raised from off the urine, It is whitish, opaline, slightly granular

and resembles much the layer of fat which floats on the surface of gravy when cool" "When it is old cubical crystals are sometimes detected" "It persists thus for three or four days: the urine then becomes troubled; small portions are detached from its surface and sink to the bottom, until the layer is entirely broken up. Kiestein appears to exist in the urine from the first month until the period of delivery." "Dr. Montgomery seems to think this appearance constant when the deep color and turbid condition of the urine permit of observation."

An

Inaugural Dissertation

on

Scarlatina

Submitted to the Examination

of the

Provost Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Joseph Veasey Wallace

of Maryland

To

James Robert Ward. M.D.

Sir

Permit me to inscribe to you the following imperfect dissertation, as a tribute justly due you for your mental worth, and professional character, as a grateful acknowledgement of the many advantages which me conferred upon me, and as an earnest of the reverential feelings with which you are regarded by,

A grateful pupil.

Scarlatina

The number of deaths caused annually by scarlet fever in most parts of the world, indicates it as a disease occupying the front rank, in point of practical importance. In the United States, it figures so largely in the annual bills of mortality, that if an aggregate estimate of all the deaths it causes, within a period of twenty years, were made and compared with the mortality caused by the epidemic which just now causes the world to quake with fear, the latter disease would become, if not insignificant, at least of secondary importance. Whilst epidemic cholera in its energy, when the virulent family, carries off its hundreds and thousands at a single charge, maintained only for a short time, scarlet fever consigns to the tomb its tens of thousands, by its slow and perpetual siege. Cholera does its work quickly, and sinks exhausted by the effort, while scarlet-fever works more slowly and acknowledging no respite, is almost an entire stranger to fatigue. This disease like all other exanthematous, begins with languor or uneasiness, pain in the back and limbs. Fever sets in, with a frequent pulse, hot dry skin, furred tongue, anorexia and muscular debility, occasionally with nausea, and

vomiting, with more or less headache, sometimes amounting to delirium, stupor, coma or convulsions. Along with the fever, sometimes beginning with an eruption, there is almost always more or less irritation or inflammation of the fauces, which upon examination appear red and swollen. And the tongue throughout covered with a white or yellowish white fur, excepted projecting red papillæ upon its surface, and is red at the tip and edges. Generally upon the second day the eruption makes its appearance, although in some of the most malignant attacks it does not show itself untill the fourth or fifth day. The eruption generally begins in minute spots upon the face neck and breast, spreading rapidly to the other extremities, and invading at last the whole body. The minute spots shading coalescing the whole body appears at last to be universally red. The color is generally deeper in the groin and flexures of the joints, than elsewhere. In some cases there appears upon the fourth or fifth day, a number of small vesicles, filled with a colorless liquid, resembling sudamina. The fluid becomes absorbed, and the cuticle flakes off in the form of a thick white scurf. The appearance of scarlatina in favorable cases about the end of the eighth

or sixth day, terminate by desquamation, commencing where the eruption first appeared, and receding as it commenced. The appearance of the tongue in scarlatina is characteristic of the disease. In the simple and anginose form, it is often covered by a thick white fur, through which may be seen the reddened and elevated papilla, the edges also become of a bright red color. When the fur is thrown off it leaves the tongue preternaturally red and raw looking. Authors generally divide the disease into three divisions or grades, viz. Scarlatina simplex, Anginose and Maligna.

Scarlatina Simplex is generally distinguished by the mildness of the attending symptoms, more especially of those of the throat, if they should be present at all. The fever and the rash are the chief symptoms of this variety, to which attention is usually directed; but in a good many instances the fauces are more or less reddened and inflamed, and sore in some cases, but seldom to a serious extent.

Scarlatina Anginosa is characterized chiefly by the evidence of the affection of the throat, though it is also attended with the rash. The early commencement of this variety is generally at-

tended by swelling of the fauces, soreness of the throat and difficulty of deglutition. The eruption does not appear as early as in the simple form, but is delayed often to the third or fourth day. The rash too is less abundant and diffused in this form, and may even be confined to one, as to the hand or arm, or distributed in detached patches, very sparsely diffused over the trunk, separated by intervening healthy skin of its natural condition. Sometimes however it makes its appearance over the whole surface, displaying the uniform redness of the simple variety. Now and then after partially appearing, the eruption recedes and returns after a longer or shorter interval. The pulse is generally greatly accelerated beyond its normal standard, and the skin is scarcely hot. The fever is much more intense than in the simple variety, and may sometimes be attended with delirium and coma. The inflammation involving of the throat is sometimes frightfully intense, causing great pain and impeding deglutition and respiration

Scarlatina Maligna

In this form of the disease, if the eruption appears at all, it

is of a dark livid hue, jaded aspect, and is attended by a feeble pulse, cold skin and bluish discoloration. The patient may sink at once under the violence of the poison, and life may be terminated in a few hours. In these examples, sudden and extensive disorganization of the vital functions may be induced by the cause acting upon a constitution naturally unsound or rendered so by bad habits. Cases are occasionally to be met with, where scarlet fever, however extensive, in which comatose symptoms, faintness, anxiety, a feeble and frequent pulse; cold or hot skin unequally manifested; slow embarrassed respiration, or irregular and accelerated, pale or livid face, and now and then complete coma occur. In such cases there will be feeble efforts at reaction, and the febrile heat will be but transitory and partial, or if the rash appears, it will assume a violet hue, and only show itself in spots, or small patches; the powers of the system give way and distinctness the scene upon the third day. Besides when the cause acts with severity, or the constitution is more vigorous, the attack comes on with the symptoms of the anginose variety. The affection of the throat is distinguished by a deeper redness, inclining to livid, and the symptoms are decided typhoidal or malignant as the disease advances,

distinguished by increasing feebleness of the pulse, unequal warmth of body, a fading and increasing rash of a livid hue. As the disease progresses the throat becomes foul and sloughy, discharge takes place from the nostrils excoriating the skin, upon the lips. The nostrils become so much swollen that the patient can scarcely breathe. The glands of the neck become enormously enlarged. The acrid matters furnished by the ulcerating and gangrenous throat irritate the nasal membrane in one direction and the alimentary canal in the other, giving rise to diarrhœa. Cases of scarlatina are to be met with during the prevalence of the ordinary varieties of the disease, and sometimes it occurs as the prevailing form; but it is liable to appear endemically, or unless it appears without the rash, and its seat is principally in the fauces, attended with more or less general fever. This variety presents the ordinary course of scarlatina, as regards the throat affection and is distinguished by its great intensity. Scarlatina is unquestionably an inflammatory disease, and the skin as well as the mucous and serous surfaces seem to be its primary seat. It is unquestionably a contagious disease, although the poison is not so strong or so

uniform as that of small pox. Fomites soon lose the infectious properties, if they be exposed to the air; but the contagion of scarlatina lurks about the apartment, or clings to furniture or clothes for a long time, even after care has been taken to purify them. As a general thing it occurs but once in the same person, though many departures from this course have occurred. If such cases were carefully examined you would likely find that the patient had the disease but partially, that is, they had the rash without the throat affection, or the throat affection without the rash. The sequelæ of scarlatina, are inflammation of the pleura, pericardium, and sometimes of the tracheal membrane and pericardium; occasionally purulent deposit take place in the joint, and abscess form in the vicinity of the parotid and sub-maxillary glands. But by far the most frequent sequelæ of scarlatina is dropsy, which most frequently follows the unpleasant variety and comes on in ten or twelve day from the appearance of the rash. Anatomical characters: Occasionally every appearance of the eruption disappears after death, or remains may be seen in purplish red spots. Various internal organs may be found congested, and around any of the lymphatic

have become inflamed, the change will be evident. In alimentary mucous membrane may be found in a state of inflammation, and in some cases the agminated and solitary glands may be found to have undergone a change, being sometimes enlarged and softened. The mean quantity of fibrine is generally found in the blood, while the red corpuscles are found increased. The cause of Scarlet Fever is supposed to be of a specific nature and evidently contagious, although there is considerable diversity of opinion in regard to it. It often prevails epidemically, and may be confined to a single district of country or a portion of a city. It differs greatly in its effects in different instances, at one time it is exceedingly mild, and at another it is of the most malignant character, sometimes inflamatory at others of an asthenic or typhoid type. In some epidemics the patients all recover, whilst in others a large proportion of them die. Age presents no obstacles although it more frequently attacks children than adults. It prevails at all seasons of the year and as a general rule occurs but once in the same person, although there are repeated instances of

it occurring twice or three times in the same individual. In the early stage, until the appearance of the rash, scarlatina may be readily mistaken for many other febrile diseases. After the eruption it may be confounded with measles, from which it may be known by the absence of catarrhal symptoms, by the occurrence of the rash after the second or fourth day, and by the characteristic uniform appearance. It is of a bright red color, mottled in the beginning and more uniform at last, without the crescent or semicircle arrangement of the vesicular eruption, and without its roughness.

It is exceedingly difficult to form a correct prognosis in this disease, as the seemingly mildest cases sometimes assume the most malignant character, and the patient may die, when supposed to be free from danger, sinking upon the other hand, those cases apparently the most highly unfavorable, among the unfavorable symptoms are, late appearance of desquamation, or deficiency of the rash, drowsiness or perfect coma; a livid or purple color of the skin and extension of the false membrane into the larynx; and great prostration, indicated by feeble pulse, cold skin, & occasionally diarrhoea, or retention.

Treatment. The mild form of scarlatina, in a vast number of instances requires very little, if any, medical treatment. The patient should be confined to the room, and the observance of the antiphlogistic regimen in regard to diet, and the proper regulation of the bowels will generally be all that is required. A gentle emetic of ipecacuanha, either with or without tartar emetic, will be found to have a happy effect in modifying the future course of the disease. It will be proper in all cases soon after the use of the mildest dose to follow the emetic by a purgative dose of calomel, which if it do not operate in six or seven hours by castor oil, magnesia or one of the saline aperients. It is all important that the temperature should be rendered as agreeable as possible. If the heat is excessive, sponging the body with water or vinegar and water will be found both useful and agreable to the patient. Cool drinks or lemonade may be allowed him. A restricted diet was important, and every thing exciting must be prohibited, and confinement in bed will be necessary until desquamation has taken place. Should the throat be much

acetated gargles of different kind may be used, of course. Borate of soda or sage tea with nitrate of potash or juice of Cinquefoil or Canadensis may be alternated. Iodide of iodide or nitrate of silver either in strong solution, or the solid nitrate may be used as topical remedies. Generally however they will not be required by reason of the mildness of the anginose affection. Bleeding when the simple variety, but on more violent occasions, and the febrile symptoms run high, if the patient constitution be good, will be proper especially if there be a strong epidemic tendency. In conclusion it will be proper to abstract it by vesicants, blistering, or other convenient parts about the neck. Refrigerants will be found of great benefit in this variety after the dilating. In employing this remedy it will be proper that its depressing effects shall not be urged to the extent of interfering with the cognitive faculties. Gently sponging the heated region from time to time, and allowing cool drinks or pounded ice, may serve to moderate the undue animal temperature, and enable us to meet the indication with certainty and without danger. Cathartics will be demanded

early after sufficient purging has been increased. Small doses of Ipecacuanha or the nitrate or chlorate of Potash may be administered, inducing relaxation of the skin and diaphoresis. Should the lung, liver, stomach, intestines, brain or any other organ be seriously menaced, after venesection and other enfeebling remedies have been employed, we should have recourse at once to counter irritant. In cases involving the pectoral organs, revulsion by dry cupping or vesicants may be employed. If however the symptoms are very acute, and the pulse active and strong, bleeding cupping should be practised. The propriety of applying revulsants to the throat has been questioned, when the congestion or pain exist. Rubefacients that act moderately should be used, such as the ammoniated, camphorated, or turpentinated liniments. These remedies should be applied so as to keep up a proper degree of counter-irritation. Great care will be required during desquamation and for some time after in regulating the bowels, diet, and exercise. Early exposure to wet, cold or variable temperature must be prohibited.

Scarlatina Anginosa. The general treatment described in the sequel, will in general be applicable in this form of the disease. There is the greatest diversity of opinion upon the propriety of bloodletting in scarlatina; some strongly insisting upon the use of the remedy, in a most active manner in the early stage; others consider it hazardous under any circumstances. It should be borne in mind that the natural tendency of the system is to an adynamic state; but it should also be recollected the frequency of the cause in certain epidemics, occurring at different times than in others. Should inflammation show itself in any epidemic, of a more sthenic character, than usual we may use blood letting with caution. Cathartics will be demanded early in the form of the disease. Calomel may be given in combination with antimonial, and should it fail to purge in four or five hours, it should be followed by an magnesia or salts. Should the bowels have a tendency to diarrhoea, rhubarb may be given in combination with kino-mag, adding a small portion of opium. Frequent, active purgation, is not necessary, but should more

be carried to the extent of ameliorating the condition; they should be kept on a diuretic state during the convalescence of the disease. Refrigerants can be safely and beneficially used, only when the animal temperature is unduly exalted. Diaphoretics will be demanded as soon as the force of the fever has been subdued. In the sub-acute form stimulating sudorifics will often be required; gum camphor with Ipecacuanha, salts of Mendenhall, or Nitr. potash, or tartar emetic may be given. Counter-irritants will sometimes be demanded to counteract certain local affections. When the animal heat is unequally diffused, it will be necessary to restore it to those parts in which it is defective, as well as to equalize the circulation of the blood. For this purpose, friction, rubefacients by mustard, heat artificially applied, ammonia, capsicum, oil of turpentine should be employed as indicated. If the pseudo-membranous or gangrenous patches are observed on the fauces, and the color of the mucous membrane is of a dark red, infusion of capsicum or the pseudomembranous, hypophen is one of the best applications. The sulph. zinc or ammonia and of iron, and also the nitrate of silver when the patches liberate to invade the larynx. The offensive odor which

proceeds from the throat, may be counteracted by gargles or washes, of solution of creasot, oxide of zinc or lime. Should there be marked debility and tendency to increase, tonics and stimulants will be necessary. Should the stimulants fail to maintain a proper action, tonics must be employed. Should abdominal symptoms ensue, if they are slight, they will generally yield to purgatives and diuretics; but should evidence of inflammation show itself we must adopt more active measures, blood may be taken from the arm by venesection, and a mild mercurial course may be necessary.

Scarlatina Maligna. In this form of the disease it will seldom be found safe to bleed, by reason of the rapid tendency of the disease to destroy life, unless it commence in the form of one of the other varieties. Our chief reliance must be placed upon emetics, cathartics, refrigerants, diaphoretics, stimulants, tonics, revulsants, and contra-irritants. In the commencement of the disease it may be necessary to combat fever, cathartics will be demanded, but purging must be governed by the same indication

and directed to the same objects as in the other varieties. The same may be remarked of rubigirant, terminant, dry, insidious, tonics and counter irritant. The topical treatment will be the same as I have mentioned in the angina variety only it must be employed more energetically." The following formula is employed in the form of the disease in the West Indies with great advantage, Two tablespoonfuls of the chloride of sodium, with eight tablespoonfuls of bicarbonate are infused for an hour in a quart of boiling liquid composed of equal parts of water and vinegar, strain and when cold, give in tablespoonfull doses every half hour. It may also be used as a gargle. It however only in the malignant attack that the remedy is applied energetically." Dr Chevers. A few years since the attention profession was drawn to treatment of scarlatina by inunction, by a Dr Schneeman, physician to the king of Hanover. Upon the first discovery of the disease the patient must be rubbed night & morning over the whole body with a piece of fat bacon, in such a manner that with the exception of the head, a covering of fat is very uniformly spread. The advantages of the treatment are said to be that it prevent the patient from taking cold, that the dry bitterness

of the skin is entirely removed, and also the stinging. The author says that the beneficial results of the application are soon observed. "In a rapidly increasing on magic, all, even the most painful symptoms of the disease are allayed, quiet, sleep, good humor, appetite return, and there remains only the exhaustion to quiet the sick room?" I know nothing of it from personal observation, having seen it used but in a few cases, which were of the malignant type. The employment of this remedy will not prevent the administration of such other remedies as the symptoms of the case may dictate. Belladonna is believed by many to act as a prophylactic against Scarlatina, but I believe it is thought little of by a majority of the profession. Three grains of the extract are to be dissolved in an ounce of distilled water and three drops are to be given morning and evening to a child under twelve months old, and a drop more for every year above that age.

An

Inaugural Dissertation

On

NATURAL LABOUR

Submitted to the Examination

of the

PROVOST REGENTS & FACULTY OF PHYSIC

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Jno. W. Shields

With the many improvements, which have been made in modern medicine, for the mitigation of human suffering and the avoidance of human fatality, none, hold a higher rank, than those connected with the Branch of Obstetrics – The improvements here, consisting principally in a proper appreciation of the time at which, ~~assaniral~~ assistance should be given, and the necessary amount – Formerly you one aware, that management was at an exceedingly low ebb, and nature was considered kind enough, if she but gave an ignorant midwife, something to catch hold of, and pull by which was followed as you know, frequently, by the most disastrous consequences – but as educated and scientific minds, were brought to bear, the follies of centuries were abolished, and a new Era in Obstetric Medicine established – Once and not very long since (by the way), it was asserted by high authorities, that the Obstetric was "An Art foreign to the habits of Gentlemen of enlarged academical education" – Such a wise & salutary Revolution has since taken place, that nothing but Education and Competency, can recommend an individual for this practice, with the larger portion of the community – Our object in this paper then is to trace out the normal function & note improvements in its conduction

To do this ~~[illegible]~~ properly and intelligibly, we shall 1st define what we mean by natural labor, 2d its Symptoms, 3d Its Stages, 4th its management & 5th Convalescence from its effects.

1st Definition. By natural Labor we mean any, that can be concluded by the unassisted powers of nature, with safety both to the Mother & Child. We are aware that many make their definitions to depend, upon the part presenting, but in our mind, the one we have adopted, (very the one we were taught) is best calculated to convey a correct and definite meaning of the terms employed

2d Symptoms. These are appropriately divided into two classes — those which are premonitory of approaching Labor, & those as declare that that process has actually commenced

Of the first description, Enlargement of the abdominal tumour, is the earliest, consisting of its decline about the middle of the month

mouth, which up to that period, had reached from the Os Pubis to within a short distance of the Ensiform cartilage. This is directly opposed to what we would a priori suppose, since increase of the Fœtal bowels (which absolutely takes place) would lead us to infer, that the tumor would ascend still higher. This not being the case, we are naturally led to inquire why; is it not so? Some various speculations have arisen and gone, in efforts to explain this Phenomenon, but we think it can readily & reasonably be accounted for as follows. The weight of the uterine globe, insensible contractility of its fibres, in conjunction with the laxity of the pelvic tissues is amply sufficient to account for and elucidate this process. That such changes take place is undoubted and we do not for a moment hesitate to yield to the explanation here given particularly as it is

supposed
by some of the best authorities known in the Obstetric art. Frequently it has been found to be sudden and abrupt in its approach, a grievous burden, retiring at night with the anticipation distension of the abdomen, rises in the morning, surprised, to see how changed her appearance — This sudden is unusual, it generally being more tardy in its approach, lessening imperceptibly day by day, up to the period of confinement — Nor is this any thing than a good omen, for it indicates a roomy Pelvis, as well as a disposition in the soft parts to relax & yield, a condition so necessary to the easy and happy accomplishment of the labor — Another and favorable symptom is, a moist soft mild & moisten of the vaginal & surrounding parts, together with slight mucous discharge filling the vaginal Canal

A third is a peculiarly capricious state of

the mind, as evinced by expressions of fear and foreboding as to the final result. She becomes restless uneasy and fidgety. Strange longings for a variety of objects, often a complete series of hysterical symptoms present themselves all of which under the enlivening process of Labor rapidly disappear

Of the symptoms which declare that Labor has actually commenced, the Irritability of the Bladder & Rectum, as shown by frequent desire to Micturate, with the same frequency of inclination to go to Stool. Such Symptoms are to be anticipated, knowing as we do the intimate sympathy, existing between each organ of the body, and its fellows, and particularly with those that are contiguous & receive their innervation from the same source. As it the case with the Rectum bladder & Uterus. This is a very frequent & pretty reliable symptom of commencing labor, its cause

probably ~~having its~~ origin during in the dilatation, Os-
Seldom indeed are we impelled to the use of
remedies for these conditions, yet they may
become so distressing & harassing to the
patient, as to demand our interference, which
however should always be reluctantly given,
since we know that in a short time
they will probably cease, seldom continuing
after the dilatation of the Os - If we should
deem it necessary to use medication we may
have recourse to a demulcent enema; & if
necessary a few drops of Laudanum ~~&c~~
given, with a happy result -
A second symptom of this series is the
Sympathetic affection of the stomach, indu-
cing nausea & vomiting - This is very constant
& its tendency is to relax the Os Uteri, to
induce the unduly contracted fibres to yield,
and give way, to the pressure behind -
and often is this object accomplished most

admirably - a rigid hard and firmly contracting ring, one that has shown no disposition whatever to dilate, will frequently during the continuance of this act, take on the dilating process, so that a very short time suffices to place the parts in a condition for the safe and easy passage of the Uterine contents. Such marked success on the occurrence of spontaneous Emesis, very naturally suggested the artificial induction of that act, in difficult cases - But unfortunately the same good effects did not follow a resort to such an expedient, failing completely in numerous instances, in others being but slightly beneficial, so that at the present day it is seldom if ever resorted to - The act of vomiting doubtless in the first instance depends upon the dilatation of the Os, but subsequently after dilatation in a very great measure, depends upon the very act which it had previously induced - the vomiting - Therefore we should

always look upon the spontaneous occurrence of vomiting, with a favorable eye, as indicative of salutary processes in progress in the abdominal cavity. We should be careful however to distinguish this from another kind of vomiting occurring in weak & exhausted frames, which can easily be done by observing the period at which it takes place, the nature & appearance of the ejected matter & the concomitant symptoms of from exhaustion, unless of the vomited matter being or consisting principally of ingesta, with some bilious secretion, it is dark and coffee ground in appearance. In the one case the general appearance of the patient strikingly contrasts with the extreme debility of the other. In the one unless of Emesis appearing early it occurs in the later period of the disease. These and other symptoms will amply confirm our Diagnosis in the one case and the other.

rigors or shivering constitutes another symptom. The patient shakes often the whole bed, complains somewhat of cold, but not that intense icy sensation of a genuine "shake", but can be made comfortable by an additional covering or a moderate degree of artificial heat. To further very strong & perhaps more reliable symptom than any other we have mentioned, is the appearance of a sanguo gelatinous fluid in the vaginal secretion. It consist of gelatinous clots, in the mucous secretion of the canal, slightly reddened by a small quantity of Blood. It appears about twenty four hours anterior to the commencement of expulsive efforts or rather true labor pains. It originates in the Glandulae Nabothi surrounding the Os Uteri, which until to this period had secreted that gelatinous substance, which after conception completely closes the Os, but which now that the Orifice

is dilating, becomes separated from its attachments, falls into the vagina & thence is expelled. The coloring portion, the blood, is derived from the necessary rupture, of the minute capillary vessels, immediately surrounding the Uterine Orifice, during the process of its dilatation.

Next of all the symptoms pregnancy of this State, Pains are by far the most significant & truthful. They originate, or have several sources, as in the excessive contraction of Uterine fibre, or of muscular fibre (for these are one & the same) and like severity of contraction is followed by the direst result in every part of the body (extra partibus) in the compression of the sensible structure, which lines the Uterine cavity, against a solid & unyielding body, and in the compression of the Ovum against the sensitive os during the dilating process.

The Character of these pains differs in the different stages of Labor, in the description

of which, we shall more fully discuss their peculiarities = Many causes may contribute to the suspension of their action, as for inst. excess, violent mental emotion, or the administration of Opiates or any of the narcotic class of remedies - at first they are intermittent, regular, though comparatively weak, with a long interval between them - As the labor progresses, they become more frequent, more severe & last longer, until toward the close they become as it were one long continued pain, with scarcely any if any intermittency & intensely severe - Such is the course of natural & true pains, But we are to prepare ourselves, to make a rigid & close examination, for it is not every pain that occurs near the end of labour, that is a true one, for on the contrary we have spurious ones, which simulate very closely indeed the true, but which

by careful examination; may be distinguished from ~~each~~ other – when spurious they are irregular in time & duration or rather in imperfinate duration, and instead of being fixed are wandering & metastatic – Should however we find the diagnosis not all difficult, we have an infallible expedient in the examination of the Uterus through the Abdominal walls, when if they be true, the viscus becomes hard tense and contracted, and as the pain subsides, we find the tumour becoming soft and ~~flaccidity~~ flaccidity – and in the examination per vaginam, when we will find the os in a dilated or dilatable state, with corresponding laxity of the surrounding parts. Many other differences might be pointed out but we do here as in the rest of this paper, only speak of the most important & chief means of accomplishing our end not considering it necessary to enter into details.

The treatment of this state, is on rational principles, and sufficiently obvious without being here pointed out—

2d Stages— For convenience of description; we shall divide these into three, the 1st terminating with the dilatation of the Os Uteri & rupture of the membranes 2d with the Expulsion of the Fœtus & 3d with the Extrusion of the Placenta—

The first is marked by being the longest, most distressing & hardest to be borne arising from the severe tearing grinding pains which accompany dilatation, & probably much aggravated, by the patient's becoming aware, that whilst they exist a speedy termination to her labours is not to be expected— She becomes irritable, uneasy and anxious, Exceedingly restless, with a constant disposition to move about, which should not be denied. Her Gesticulations are peculiar being of a twisting or writhing Character, whilst

her cries, are expressive of acute suffering and determined impatience. As regards the duration or the time occupied in this stage no definite rule can be laid down. It probably varies more than either of the others and in Primipara, usually occupies more time than in those who have born children. In the latter case the parts appear to have become accustomed to the dilating process, as they perform it more easily and rapidly than in the former. A few examinations, however, will enable us to form a tolerably correct opinion, on this point: but it cannot by any means be implicitly relied upon. If on making such inspection, we find the os yielding, soft, and cool & moist with general relaxation of the adjoining parts, & a pretty free discharge from the vagina, we may anticipate that dilatation will have been completed within six hours subsequent

to the setting in of labor - but should the os be rigid, not & hard, with the neighboring parts dry and feverish; & little vaginal discharge, we may pretty surely calculate upon a tedious attendance - This however is by no means universal, for we may have the os & surrounding parts, with the above contraindications to dilatation, lasting on the dilative act, and completing it in the ordinary time, whilst a soft, relaxed os, may retain this condition long exceeding our anticipations - In fact, as I have before said, no rule can be given, but we may and do calculate probabilities, preparing ourselves at the same time for disappointment - Dilative rapidity differs remarkably - Temporarily we believe, this process is carried on more slowly in the outset, than subsequently - Must it take usually occupy as much time, in dilating to the size of a shilling, as in the

completion, of the whole of its remaining distance. This has been sought to be accounted for, by the fact that as soon as the Os is dilated sufficiently to receive the bag of waters, that it acts as a mechanical wedge, prying open as it were the Uterine Orifice - Now this may be an assistant, but we are very far from believing, that this means is the chief in the accomplishment of this object - we believe, that by far the most important part of this act, is due to the contraction of the Longitudinal Uterine fibres, and that dilatation would take place nearly as rapidly, without the bag of waters as with them, except so far, as their absence might excite the Uterine fibres to undue action, in consequence of their immediate contact, with a foreign solid body. This contact exciting to spasmodic contraction, as well the fibres around the Os as in other parts of the Uterine Globe & thereby impeding the

progress of the labour at each contraction the bag of waters is protruded through the os, & recedes on its cessation, its chief office being to afford a soft, yielding substance, upon which the uterus can contract safely, without danger to its walls – Their rupture is usually synonymous with full dilatation, though this is not constant, as modifying circumstances essentially influence it – as when a rigid, thin cutting edge is present, against which the uterine contractions urge the membranes and thereby rupturing them – Or when they are of unusual tenacity detaining them against the impelling force –

2° After the rupture of the membranes, the second stage commences. There succeeds a short interval of tolerable ease after such rupture when the pains again set in. The symptoms generally differ from those of the first stage both as respects the mother and the child –

of the ~~[illegible]~~ we have the pains less intermittent, more severe and lasting longer - The peevish fretting cry of the first stage, is ~~now~~ replaced by a sound, resembling that made by a person, when making a violent effort at lifting - The patient is distilled from giving utterance to her feelings, in a distinct cries, since the muscles which are requisite for that purpose are engaged in forcing the chest, so as to afford a fulcrum against which the abdominal muscles are to support themselves, whilst aiding in the expulsive efforts - The patient is more fixed, & on the supervention of a pain braces herself, by seizing any object within her grasp to give her support, whilst these efforts are being made - Each succeeding pain pushes forward the presenting part, and at the subsidence of each recession takes place but not quite

to the point at which it started – This is
one of the most considerable
wisest and most beautiful
provisions made by nature in this process,
for were the contractions to be continuous,
no time for the process of vital relaxation
would be given, the circulation would be
interrupted, sloughing & gangrene of the
soft parts would ~~[illegible]~~ inevitably ensue
leaving nothing of the disastrous conseque-
ces which would befal the Foetus –
Now too, the state of the patients mind is
much more quiet & reconciled, accounted for
perhaps as she knows, that the pains she
now bears have some direct & immediate
object in view – She appears to have regained
her energy and equanimity, and is enabled
to bear her pains with much more fortitude
& composure than in the previous stage –
As the head descends, the vaginal walls
distend, surrounding parts gradually yielded,

pressure upon the Rectum compels a discharge of its contents, the Perineum becomes distended & thinned, in some instances, so much so as to enable the attendant to distinguish the hair of the foetal head through its diaphanous walls. One pain succeeds another in rapid and painful succession, until at length, with a powerful pain - an involuntary shriek escaping the patient as the ~~[illegible]~~ head emerges over the Perineum, and the patient sinks back into a state of dreamy blissfulness, (for our pleasures are only heightened by a comparison with its opposite). This manner lasts but a short time, pains soon recommence, and with them is expelled the rest of the body - they are by far, less violent, than in the first instance, ~~often~~ and the patient finds little cause, or seldom does ~~to~~ complain - with such appearances - a second stage of labor is concluded - ~~and~~ considerable time elapses before the commencement of the

third - This interval varies considerably, usually consuming about twenty minutes - If now, the Uterine tumour be examined through the abdominal walls, we shall find it large, comparatively soft & moderately contracted - By degrees, contractions become more marked, until at length the sensation of pain is experienced, though in so slight a degree as not often to claim the notice, of the patient with whom the Placenta is lodged in the ~~vaginal~~ Vaginal Cavity. Here it usually remains some time, in consequence of the extreme tension to which the vaginal walls have just been subjected, rendering them indisposed to assume their contractile powers. Ultimately (the time being variable) such contraction does take place, as enables the vagina to expel the contents of the canal. With this expulsion the contractile efforts do not cease but continue until the bleeding

orifices of the Blood vessels have been completely closed. Were not such provision made by nature, and we know that in all that does this has a wise and beneficent object in view.) the particular vessels would continue to pour out the ~~life~~ Blood of our patient, totally beyond the control of artificial remedial efforts, until exhausted she would irretrievably sink. These contractions continue, until what was a large flabby tumour, distinctly felt through the abdominal Parietes becomes small hard and contracted.

3rd Management. This is an important & highly interesting consideration, for upon it depend the future happiness, or misery, even lives of ~~many~~ the fairer sex. This of course, varies in each stage, as in each different indications arise. By the word management we do not mean officious interference, or a premature practice of the Deformities to handle something when we have nothing to do, but we do mean a proper appreciation

of the time at which, and the amount of assistance that would be beneficial to our patient—

When then we are called upon, we should obey the summons promptly—Arriving we should give directions to the nurse to announce our presence—From her we should learn how long the patient had been in labor, the character of the pains if positive & whether or not the bag of waters had been ruptured and according as we receive a positive or negative reply, must we place our course—

If we consider it necessary to see the patient, we should enter the lying in room, in an unobtrusive manner, speak to the patient—but on some topic foreign to that which brought us thither, at the same time we should mark narrowly the pains, their frequency, severity & continuance—If they be light and short, the interval between each and the subsequent, long, and the character of the

ery indicating the first stage, we may consider, that the labor has not progressed enough, to warrant a per vaginam Examination. But should they be severe, frequent & bearing down, with a smothered cry, we should at once propose the necessity of an Examination. If resisted (as we sometimes are through extreme modesty on the part of the patient) we should urge our point with gentleness & delicacy, yet with firmness and decision, (which are not incompatible with each other) and seldom indeed, shall we find ourselves foiled. Having obtained consent, we oil the first two fingers of the right or left hand, press them up to the nates, then gliding along the Perineum, until we reach the fourchette, when the index finger should seperate gently the Labia Majora, enter the vagina in the direction of the lips of the fetus, until we reach the Os Uteri, which will be found directed backward and downward, in consequence of the fundus being tilted forward by its own weight, thus retroverting the

neck of uterus. In this examination, there are several things requiring our attention, so that we will not soon be again under the necessity of ~~making~~ repeating it — ~~a second examination~~. We should satisfy ourselves, as to whether the membranes have ruptured, if possible the presentation, & the disposition of the Os, vagina & Perineum to dilate. For the satisfactory execution of this examination, our patient should lie upon the left side, with the thighs flexed upon the body, and the legs upon the thighs (which by the way is the best position for the patient, when she becomes compelled to assume the recumbent posture, as it answers the indication to bring the axis of the Pelvic plane, as nearly as possible, in a line with the axis of the body). In regard to the appreciation of the condition of the Os, we will remember (for it has not been long since our first case.) We must through the intervening, with as much or more apparent experience, as our hands & countenance could

command, but for the life of us we could not distinguish the os, nor did not, notwithstanding, we made one essentially close examination. In our second case we were somewhat more fortunate, as we did discover this origin, though not until we had felt for some time. We imagine that a novice, has not always that acuteness of touch, that is desirable, on such occasions, particularly when placed in the position, in which I was, with no one to assist ~~it~~ but the sought for part. It should be our constant object, to obtain information respecting the presentation, at as early a period as possible, though we should never run the risk of rupturing the membranes, in the effort to accomplish this, unless they ~~[illegible]~~ be low down in the vaginal cavity. Since their rupture, would be so disastrous. Should a breech presentation take place, as we depend so much upon their integrity for the easy

correction of such presentation. It is not necessary here to speak minutely of the different varieties of presentation, suffice it to say that the fontanelles and sutures will announce a head presentation, the mouth nose and eyes the face, the fingers by the opposent thumb ~~[illegible]~~ exploring & the feet by the nearness of such distinction and shorter members.

The waters ~~[illegible]~~ rupturing, our patient should immediately assume the recumbent position, and our examination per vaginam made. Should we find that the labor had made material progress, we must remain with the patient, for although our assistance may not be needed for some time, yet it might be required, and if not present to give it, we should subject ourself to severe & just ~~[illegible]~~ censure. As the head descends, and comes to press upon the perineum, we should take our seat by the bed side of the patient; for the purpose

of supporting that structure, during the passage of the foetal head. For the sake of cleanliness, a towel should be placed between the hand, and perineum, of pressure made, not so as to obstruct the passage, but sufficient merely to give requisite support, by way of preventing laceration of the parts, to do which, properly, requires some skill and experience. As soon as the rest of the body commences to descend, the moment the shoulders come to prep upon the perineum, it should again be supported & continued until they have cleared the fourchette. The Foetus now requires our attention, our first thought should be to remove any adherent mucous about the mouth & nose lest it should prevent respiration and death by asphyxia follows ~~respiratory~~ the absence of the foetus give signs of life, until which time the chord should remain untouched

except when the child is in an apoplectic condition, when the chord may be cut, and about a table-spoonful of blood be allowed to flow. If no signs of life be present, warm baths, artificial respiration &c should be resorted to. Should however the child (as it ordinary does) give signs of life by crying, we may immediately apply the ligatures, which should always be two in number — as being more cleanly, & safer, for should another child be present with the placenta communicating, it might, & would be bled to death through the patulous end of the chord. The first ligature, should be placed about two fingers & a half distant, from the Umbilicus, so as to avoid the inclusion of any fold or intestine, that might be extruded through the yet unclosed umbilical ring. The second tied an inch or more distant from the first, when a pair of blunt

scissors, should divide the chord, between them, being careful to exclude every thing but the chord. The child should now be handed to the nurse, with directions to oil it & rub with a flannel cloth to remove the vernix caseosa, which ~~[illegible]~~ is present on the surface of every new born babe. The Uterus of the Mother, should be examined to determine the presence or absence of a second child. If present, we will find the tumour, nearly as large as before, well defined, and giving to the touch the peculiar elastic feel characteristic of the Gravid Uterus. If absent we may find the globe large, soft and yielding or large, moderately hard & contracted, or contracted small & firm. The last indicating, that the Placenta has been expelled from the Uterine cavity, the two former that it still remains. If the Placenta has been extruded, and is lying in the vagina, the hand may be

used to withdraw it — but should it be still in Utero, we are not warranted in extracting it unless constitutional symptoms demand it, or accidental circumstances render it necessary until after the lapse of an hour. When the hand may be introduced, its attachments torn, the Uterus excited to such contractions, as will expel it & the hand together. — In withdrawing the Placenta it should always be twisted on its axis, so as to wrap the membranes tightly around it, to insure thereby their extraction.

5th Convalescence — Immediately after labor, the patient should rest quietly for some time, the wet clothes from beneath her may be removed. She probably slumbers in which case she should be allowed to remain until she awakes. Warm napkins should be directed to be applied to the vulva and repeated as often as the regional secretions renders it necessary.

we do not consider that any medication is necessary, a simple draught of cold water, being all that is ~~necessary~~ useful. A bandage should be applied round the abdomen, for the purpose of supporting or supplying the loss of its (support) by the removal of the Foetus. It should reach from the Os Pubis, to near the the Ensiform Cartilage. The discharge termed the Lochia, is that which immediately follows delivery, consisting at first, of Blood & ~~Mucus~~, & subsequently becoming purely serous. It originates in the patulous orifices of small vessels, which have not yet closed completely, and as they continue to diminish their calibre, we have the discharge becoming more fluid, in consequence of the opening becoming too small to admit the exit of fibrine, & retention consequently taking place then the discharge, and ultimately the Blood Corpuscles are also retained when as I have before said we have nothing remain

but a thin serous secretion, which is soon at last checked by the complete closure of the vessels — a free copious discharge is considered a good symptom, as it appears to have a depletory action upon the congested organ — relieving the blood vessels of their increased contents, necessary only during their dilatation — Its continuance is a good criterion in regard to exercise — For as long as this discharge continues, at all profuse, no violent exercise of any description should be taken, as it shows, that the parts within the Pelvic cavity have not yet regained their normal standard of healthy action — We should make inquiry as to the state of the chilos bowels, and whether or not the bladder has been emptied and according as we receive a positive or negative reply, so must we act in one and the other case —

The patients diet for some days must

bland & simple, no animal food should be allowed until the third day, when if given, it should be in solution, as beef tea & ~~Broths of~~ Chicken Broth – All the while, strict attention should be paid to the patients bowels – Throughout the disease, stimulants should be sedulously avoided, as having a direct tendency to determine to the brain, a condition always fraught with danger in such cases – The patient should never leave her bed for a week at least, and when she does do so, her sofa for some days should rest her – the mean no exercise, farther than walking from the bed to sofa should be taken – The Child should be put to the breast, at an early period, as we find therein contained, an excellent substitute for the drugging it would once have undergone, with the view of acting upon its bowels – In the milk at this period

there is an purgative material, which acts more kindly, and beneficially upon the infant than any thing we can possibly administer — It is of Natures own elaboration, and doubtless there deposited for a specific purpose, which purpose remained for a long time unknown — At the present day however it is applied to its legitimate use, at least by a large majority of Accoucheurs — Midwives however still continue in many instances to administer drugs to our own knowledge, than which nothing deserves more severe condemnation

Under such treatment our patient for the most part does well, though even in the best treated and most favorable cases, complications may arise, placing the life of our patient in the utmost jeopardy, but of which at present we are not to treat

Thus then having followed our patient to a happy finale, in one of the most beautiful ~~most~~ nice & important functions, in the Human economy, I submit this paper, with my grateful acknowledgements, for the assistance and instruction given me, by our Obstetrical Professor, with the hope that it may meet with a kind & favorable reception at your hands.

Inaugural Dissertation on Lymphocele, submitted to the Examination of the Medical Faculty of the University of Maryland for the degree of Doctor of Medicine

by

Edward Thomas Chalmers

Maryland

Bronchocele

This affection which consists essentially of an enlarged state of the Thyroid gland; it was known to the greek writers who used this term in the same sense in which we now employ it; In Switzerland and in France this affection is called goitre; it is known in England as Derbyshire neck from its prevalence in that County the term Bronchocele which has been applied to various

affections of the thyroid gland to be restricted to hypertrophy of that part; an exaggeration of its natural structure with augmentation of its volume; The texture of the gland becomes coarser; its blood vessels grow larger and increase in number its cells are magnified and filled with a thick viscid secretion sometimes the lobes are affected separately; frequently one lateral lobe is larger than the other; frequently the right lobe is affected alone and Prichard states he found the right lobe more frequently enlarged than the left; When the gland is very large it may produce difficulty

of deglutition and breathing and congestion in the head by its pressure upon the trachea, oesophagus and jugular veins, unless the enlargement is very great it will yield to the motions of the larynx, this gland is subject to various kinds of enlargements, it may enlarge from inflammation chronic or acute and then it will be hard, tender, and painfull, it is not in itself a painfull disorder; the system is very seldom affected from this disease; it is a deformity however, and by its mechanical pressure and weight when very large occasions great pressure and

distress or even death, the swelling which is more or less unequal in general has a soft spongy feel especially when the disease is not a very advanced stage, simple Bronchocele or Hyperplasia is the most common form of the disease and is where an enlargement of the thyroid gland, the integuments covering the part remain entirely unchanged, Women are observed to be more subject to this disease than men now and then the swelling often in its first commencement developes itself with great rapidity but in ordinary cases, it is slow, sometimes there

is no more than slight fullness of the throat which some persons I believe think rather graceful than otherwise, Alberts has seen one example in which the tumour became cancerous and destroyed the mother of a family, The Compound Bronchocele is that which presents the greatest variety, sometimes a more or less voluminous cyst is formed around filled with a putrescent or purulent matter, sometimes in Compound Bronchocele calcareous and other heterogeneous substances are found, In two cases Alberts found on the orifice of the

enlarged gland a yellow fatty mass and in a third instance the gland itself formed a true sarcoma, the same author mentions a case of a tumour reaching down to the thighs. on the other hand a tumour not larger than a hen's egg if it happens to occupy the central portion or the isthmus may pressure inwards and compressing the trachea hinder respiration and even threaten suffocation sometimes the tumour extends from ear to ear, fluctuation is usually perceptible and the pain transcendingly violent the skin retains

its ordinary colour nearly
where the tumour is of very long
standing and great size the
veins of the neck becomes more
or less varicose, we very seldom
see Bronchocele in this country
except in females in whom the
swelling has been known to
come on or increase rapidly
during the confinement to child
and it is frequently observed
to undergo a temporary
enlargement at the menstrual
period, Dr Copeland has
seldom met with goitre in
the female unconnected with
some kind of irregularity
in the catamenial discharge
or disease of the uterine

function and he has never
been a case before the age of
puberty except in India
where the disease is much
more prevalent than here,
the proportion of males
affected there is greater than
females, and it begins
before the age of puberty in
both sexes. Dr Elliotson states
that he himself saw a boy
residing in Switzerland
affected at the age of 4 years
but Children have been
born goitreous, a case
mentioned in the London
Medical Repository of a Child
born in Derbyshire with
Bronchocele of considerable

hze, children born of goitrous parents are often affected with goitre it is common in some of the valleys of the Alpes Pennines and Pyrenees, there are some places where the disease is so frequent that hardly an individual is totally exempt from the disease I carry in travelling through the valley of Maurienne noticed that almost all the inhabitants were affected with goitre, in many the swellings is enormous it is impossible to conceal it by any kind of clothing, a state of idiotism is another affection is sometimes

combined with goitre in countries where the later affection is endemic, hence all whom are affected with the disease are not Goitrous or bretins hence as Dr. J Burns remarked that the combination of Bronchocele must be accidental and in many Goitrism is complete where there is no enlargement of the thyroid gland or where the tumour is not larger than a walnut so that no impediment can exist to the circulation to or from the Brain, Bronchocele is endemic & prevalent in certain

localities, persons undergoing to live in these localities often become affected with this disease

Causes of Bronchocele are little known but certain localities however seem to contribute to its frequency for we observes that the disease is not prevalent in very high places nor in open planes but quite prevails in the bottoms of many high mountains as in the the close humid valleys of Switzerland which lye at the feet of very high mountains Several writers affirm that it is most frequent in low damp and confined spots. where the stagnant

generally caused by the presence of either sulphate of lime or the carbonate of lime. Dr. Bouillaud of Geneva declares that the use of hard spring water in the lower streets of the town brings on goitre very speedily. The presence of magnesian limestone always implies the existence of the disease, the deleterious agent has been traced with tolerable certainty to water and hence to some element of the soil washed by the water. It is said that the hidden cause of goitre and cretinism lurks in some chemical quality of man's natural beverage for surely it would

be a noble achievement of our art and a signal blessing provided for hundreds of human yet unborn, thus to prevent the disease & deformity the discomfort of Bronchocele and to forbid with its very fountain, the more hideous and loathsome disfigurement of the body as well as the mind that characterises the ~~[illegible]~~ cretin, we proceed next to the Treatment of Bronchocele or goitre One very important point in the Treatment is obvious the removal of the patient from the infective or locality in which the poison exists; for a fact stated by

Alberts that the change of air has more effect on the complaint than medicine as he has known many a Swiss lady who went to Paris with Bronchocele in whom the tumour subsided after residing sometime in that City, Blood letting topical has been employed with success a Blister kept open has put a stop to the growth of the tumour Burnt Sponge has been with great success very much used, its efficacy however depends solely upon the Iodine it contains the effects of Burnt Sponge is thought to be greatest when in combination with Burnt Cork, pumice Stone

Stone, some persons use Sponge combined with Calomel, the remedy which has of late years superceeded all others is Iodine, Muriate of Baryta has been recommended, the disease in its inveterate form has been removed by the application of Caustic, the establishment of an Issue has been recommended the introduction of a Seton through the operation of removing the gland by the knife has been performed in this Country with great success but is seldom advised, but Iodine is the sheet anchor in Bronchocele if you combine Iodine with the Iodide of potassium it is the

form in which we may employ it there is a mixture of Liquor Potassi Iodid Compositus in which one grain of Iodine in an ounce of the liquor in which one ounce would be given at the dose but we may commence with a drachm or two and increase the dose if needed friction over the tumour with an ointment has been very beneficial in all most all enlargements of the glands the ointment should be rubed on twice a day the Tincture has been used with great success and therefore Iodine is the sheet anchor I will be under the necessity of closing my remarks

An Inaugural Dissertation

On The
Human Mental and Physical Economy
and
Their mutual dependence.
Submitted to the examination
of the
Provost, Regents & Faculty of Physic
of the

UNIVERSITY OF MARYLAND:

For the degree of Doctor of Medicine.
By

John F. Lowell,
of
Baltimore Maryland.

and
Respectfully inscribed to my esteemed preceptor C. T. N. Handy.

1853.

It is not to be presumed that he, who has but entered the vestibule of the temple of science, should interest with a delineation of it's internal splendor those, who have traversed its labyrinthian mazes - that he, who has but tasted of the Pierian spring, should entertain those, who have copiously imbibed it's chrystal waters - that he, whose optics have never penetrated the mystic veil, should enlighten the High-priest with a description of the "Holy of Holies"

In view of these facts, permit me to solicit your indulgence, while I endeavour to comply with the requisitions of the University.

Previous to entering upon an investigation of the elements constituting the human organization & the Laws controlling them, let us roll back the tide of events for

a period of nearly six-thousand years. Let us enter the Garden of Eden and surrounded by all the beauties of Nature untarnished by the manipulations of Art; behold Man as he came from the plastic hand of the Creator. The most perfect of all his productions. No blemish destroys the harmony of his proportions. No drapery dims the lustre of his eye. No apprehensive dread produces the faltering step. But pure & undefiled he walks erect conscious of his power and the approbation of the Deity. From intuition, he is acquainted with the nature of each species in the Animal Kingdom and assigns them their respective appellations. The sentient creation acknowledge him as their superior and submit to his authority. In daily communion with the great "First Cause" and the constant recipient of his beneficence, he

dreams not that he would ——
"— Transgress the sole command,
Sole pledge of his obedience —"
and reap the lamentable consequences.

But time elapses and a new aspect of affairs is presented. The same vaulted heavens spread their azure canopy above. The same verdent earth, bedecked with lovely flowerets & embellished by beautiful foliage, invites to repose. The same majestic river rolls on in all its silent grandeur & sublimity. Nature is the same; but all else how changed!

No longer is man the immaculate being, that emanated from the bosom of Divinity. No longer does he survey the tranquil scene with unalloyed delight. No longer does his soul thrill with ecstacy at the voice of his munificent benefactor. No longer does his erect form, attired in

the habiliments of innocency, attest his conscious worth. He has fallen! The serpent has entered the bowers of Paradise; and man has yielded to the syren accents of temptation. And now we behold him, whose chief pleasure consisted in conversing with the author of his existence, trembling at his voice and shrinking from his gaze. With the germs of death implanted in that constitution, which was designed for immortality, he leaves the pleasant recesses & shady vills of Eden, with the sentence sounding in his ears - "Dust thou art and to dust thou shalt return."

But notwithstanding man lost much by his disobedience - notwithstanding his Moral, Intellectual, & Physical constitutions, have all been impaired - he still stand pre-eminent amid the wonders of

creation. It is still the noblest work of God—
We may yet observe Pokes admonition;
'Know then thyself presume not God to scan
The proper study for mankind is Man'!
Every organ still presents the indelible
impress of Deity and challenges universal admiration. His mind still operates with vigor & its productions are truly wonderful. With what mingled emotions of pleasure and astonishment, do we reflect upon his inventions & discoveries in science.

In Mechanics, we behold that greatest exhibition of human ingenuity, the watch — its exquisite workmanship — delicate adjustation — the relation existing between its several parts — the harmony which characterizes the movements of the entire structure are all calculated to excite surprise.

In Optics, we are presented, with the

Telescope and Microscope. Through the instrumentality of the former, we are rendered capable of computing the number and magnitude of the glittering host, which illumines the nocturnal sky; while the latter, reveals to us the mysteries of Nature.

In Hydraulics, we are exhibited the powerful Engine, combining the principles of Propulsion and Suction. We witness its operations and are convinced of its utility and beautiful simplicity.

Again the Electro-magnetic Telegraph, transmitting our thoughts with inconceivable rapidity, demands our encomiums and induces us to exclaim "Labor is omnipotent".

But since the Creator must be infinitely greater than the thing created, what comparison do these specimen of mechan-

ism sustains to man himself? How defi-
cient does the most perfect apparatus we institute a comparison? How in-
finitely inferior is the most ingeniously constructed optical instrument, to its prototype the eye? What invention in Acoustics can approximate the human auditory apparatus? When has Hydrau-
lics provided an engine with half the power proportionate to dimensions, as that exhibited by the Heart? What sys-
tem of Telegraphic communication can compare with the transmission of sensa-
tion and volition? What Musical instru-
ment equals the Larynx in the produc-
tion of melody? What has Pneumatics presented, which can rival the Lungs & Thorax for the reception and expulsion of Atmospheric air? What system of Levers & Hinges has Mechanics afforded, combining

strength with economy so perfectly, as the Osseous system and Articulations? What adjustment of parts in the physical world, can equal the arrangement, by which this heterogeneous mass is reduced to one organization and made to act in unison! These facts inculcate the great truth - "We are fearfully and wonderfully made."

Again when we open the volume of Nature and explore the Animal and Vegitable kingdoms, we are compelled to admire the consumate mechanism of their construction - the beautiful adaptation of means to the object to be accomplished. - Here their is neither deficiency nor superfluity; but Nature has inscribed in living characters Utility - Elegance - Economy. But when we turn from these to the contemplation of the human constitution,

and there behold all that is beautiful and ennobling in the inferior orders of creation, carried to an inimitable perfection, with the addition of attributes far transcending any else-where presented, our souls thrill with rapture and we are lost in wonder and amazement.

In the material universe all bodies are Organic or Inorganic. Although the same Chemical constituents enter into the composition of these two classes, there exists a marked distinction between them. The Inorganic are frequently simple, seldom composed of more than three elements. Their several parts may exist independently of the others. They may be decomposed and restored. In form they are angular - in volume indeterminate - They are entirely under the control of the laws of Attraction and chemical Affinity.

The Organic always have at least four elements, each in some degree dependent on the others. They may be decomposed but not restored. In form, they are rounded - in volume, determinate. Their relation to the laws of Attraction and chemical Affinity is modified by the presence of the vital power. These are the characteristic differences between the Mineral and Vegitable.

The line of demarkation between those substances, endowed simply with Organic life and those, which have superadded the functions of Animal life, is equally evident. While in common they are provided with a series of organs properly effecting the processes of Absorption, Secretion, Circulation, Respiration Nutritive Assimilation and Reproduction, there is peculiar to the Animal organization Sen-

sation, Voluntary motion and Digestion. The last mentioned not being required in the Vegitable, since its nutriment is provided previously digested.

If we trace up the scale of Animal existence, having passed all the intermediate stages, we will ultimately arrive at Man, whose possession of Moral, and Intellectual faculties elevates him far above the sentient creation and places him next to the great architect of the universe.

Thus from the atom of Inorganic matter to the great "First Cause", there exist an uninterrupted series of links

"Vast chain of beings, which from God began,
Natures ethereal, human, angel, Man,
Beast, bird, fish, insect — what no eye can see
No glass can reach —
Each moss.

Each shell, each crawling insect, holds a rank
Important in the plan of him, who framed
This scale of beings, holds a rank, which lost,
Would break the chain & leave a gap,
Which Nature's self would rue" —

Some conception of the complex nature of the human constitution may be formed; when we reflect that of fifty-five known elementary substances, Chemical analysis has detected in it seventeen; viz Oxygen - Hydrogen, Nitrogen, Carbon, Sulphur, Phosphorus Silicon, Chlorine, Fluorine, Potassium, Sodium, Magnesium, Iron, Manganesium, Alluminium and Copper.

These physical Inorganic Elements - principally the essential - combine and produce the Natural-Organic compounds - Gelatine, Albumen, Fibrine, Fat, Mucus, and several substances not so generally

diffused, as Urea, Haematine and Cretine.

These variously combined with each other and with the inorganic elements, constitute the fluids & solids, which under the influence of the vital principle, form the human organization.

The principle solid substances are bone, ligament, muscle, cartilage, tendon, nerve, integument & membrane - mucus, areolar & serous. The fluids are blood, chyme, chyle and the various glandular secretions & excretions.

Having thus briefly enumerated the substances entering into the composition of the body, we may now consider them in combination, forming the different Organs and performing their respective functions.

These functions have been divided by Physiologists into those of Nutrition, Rela -

tion and Generation. These admit of several subdivisions.

Nutrition embraces all those organs, whose ultimate object is the building up and maintainance of the various tissues. They are Digestion, Absorption, Respiration, Circulation, Secretion, Excretion and Assimilation.

Digestion appears to be the first in a series of phenomena constituting a living animal, as this is the primary and essential process, to which the aliment must be subjected in order to qualify it for the sustenance of life. It includes the subordinate functions of Prehension, Mastication, Insalivation, Deglutition, Chymification and Chylification. For the performance of each of these, an appropriate apparatus is provided. Digestion then, consists in the recep-

tion of the crude animal or vegitable substance in the mouth - its situation by the Dental apparatus - its formation into a soft bolus by the action of the Saliva and its ultimate conveyance into the Stomach, preparatory to undergoing a more important series of changes. Here the Gastric juice permeates the entire mass and reduces it to a white semifluid substance, denominated — Chyme. In order that this may be accomplished, several conditions are essential - 1. The requisite quantity of Gastric juice. 2. Its intimate incorporation with the food. 3. A temperature of 100 degrees Farenheit. A series of Glands situated in the Mucus membrane of the Stomach supply the first - its muscular investment provides for the second - and its situation probably exerts some influence

on the third. The Chyme being formed, is now conveyed into the Duodenum, in which the secretions of the Liver and Pancreas complete the process by effecting it's conversion into Chyle. The Spleen is presumed to perform some part in Digestion, but what its function is, has not been definitely determined. The Chyle is absorbed by the Lacteals and transmitted through the Thoracic Duct into the left Sub-clavian vein - thence to the right auricle of the Heart, from which it passes into the right Ventricle and eventually through the Pulmonary arteries to the Lungs.

At this point Respiration is performed. The apparatus concerned in this function comprises - the Trachea, Bronchi, air cells, Lungs, the Diaphragm, muscles of the Chest and Abdomen & the Ribs.

In the Lungs the Venous blood, containing the Chyle, is brought intimately in contact with the delicate air cells. Here an interesting chemical change is effected. Carbonic acid and water is evolved, and oxygen received, transforming the Venous blood into Arterial, which is conveyed by the Pulmonary veins to the left auricle of the Heart. This completes the process of Respiration, including the Pulmonary circulation and introduces us to the systemic or general Circulation.

The Organs involved in the performance of this function are the Heart, the Arteries & the Veins. The blood being received into the left Ventricle, is propelled by the contractility of the Heart and Arteries to every part of the system. Having performed its office, it is re-

turned by the veins, preparatory to undergoing purification and again traversing the same course.

Between the terminations of the arteries and the commencement of the veins are situated the Capillaries. These are Nature's laboratory, from which all the materials to be employed in the renovation and reparation of the tissues are derived. Upon being brought in contact with the parenchyma of the various secreting organs, each appropriates to itself the property dictated by its 'elective affinity' to the exclusion of all others. Thus the Liver secretes Bile - the Pancreas the Pancreatic fluid - the Salivary glands Saliva - the Skin the insensible perspiration - the Kidneys Urine &c. All of which are made either to subserve the purpose

of Nutrition; or are conveyed from the system to avoid the deleterious consequences, which would result from their accumulation.

The next division embraces the organs of Relation viz: Locomotion, Speech and the external senses.

The function of Locomotion is performed by the osseous & muscular systems, under the direction of the Brain. The bones constitute the frame-work of the body and are the passive organs. In the adult skeleton, they are two-hundred & fourty-six in number and present the most extensive variety in their form, size, situation, and structure. They are retained in their positions by the Ligaments. At the joints, they are supplied with cartilages which obviate the two great friction, which would otherwise result &

also renders the articulations more secure. Here also Nature has provided a serous membrane, the office of which is to lubricate the joints and facilitate their motion.

The Muscles - the active organs of Locomotion - are divided into the striated and non-striated. The former, respond to the stimuli of the Will, while the latter, manifest but little dependence on the Will and are indebted for their motion, to the Ganglionic system.

Through the instrumentality of the muscles all the evolutions, of which the body is capable are performed. Like the Bones, they vary in their nature and functions. Even the same muscle by calling into action different sets of fibres, may produce results diametrically in opposition to each other. Thus, the Sterno-

cleido-Mastoidens, by the contraction of its anterior fibres, inclines the head towards the thorax, while the action of its posterior fibres, throws the head backwards. The diversity of muscular action is beautifully illustrated by the different combinations, and relations which the facial muscles assume constituting expression.

Another function, connecting the body with external objects and a mark of distinction between man and the other species of the animal creation, is speech. True the inferior animals are capable of communicating their desires; but the human being alone, possesses the ability of holding intelligent intercourse. Voice is formed in the larynx, by the action of air expelled from the lungs on the vocal cords. In the mouth, it is modi-

fied by the Tongue, Teeth & Lips and articulate sounds are produced.

The External organs of Sense combined with the Nervous System, constitute the remaining organs, by which man is connected with surrounding object. The special senses are not peculiar to the human species, being diffused throughout the Animal Kingdom.

The sense of Touch is the most rudimentary and may be regarded as an exaltation of common sensation, from which it arises by regular and imperceptable gradations until it attains its perfection. In proportion as the papillae, in which it is resident are isolated is this sense developed. This is illustrated in the Tongue Lips & tips of the fingers. The nerves, upon which the sense of Touch depends are the same as those, which endow the body

with sensibility by the posterior ganglionic roots of the Spinal cord and the sensitive Cerebral Nerves.

The sense of Taste is in some respects a modification of Touch. It resides in the Tongue & Fauces and is dependent on the Glossopharyngeal and Gustatory branch of the Fifth nerve. Sapid substances being brought in contact with the Papillae, provided with filaments from these sources, the impression is transmitted to the Brain and taste results.

Smell is produced by the stimuli of odoriferous particles applied to the Olfactory nerve, which is distributed upon the schneiderian membrane.

The eye is the organ of sight. The ray of light having penetrated the various structures designed to bring it to a proper focus, falls upon the Retina and vision

ensues.

The remaining special sense to be enumerated is Hearing. It involves the condition of the Auditory nerve, produced by those oscillations of elastic matter, from which originate the phenomena of sound. These vibrations are communicated, to the intricate apparatus prepared for their reception and condensation, this being traversed, an impression is made upon the nerve, which results in audition.

For the performance of all these functions, it is essential 1. That the stimulus should be applied 2. That the mechanical apparatus should be in a condition to convey it. 3. That the nerve should be in a condition to receive the impression and transmit it to the Brain. 4. That the Mind should take cognizance of it.

The feature most characteristic of the

animal and which distinguishes it from all other organic bodies, is the possession of a nervous system, consisting of nervous centres and nerves which serve as a conducting medium. The nervous influence presides over the entire physical economy. Through its agency, all motion whether voluntary or involuntary, is executed - all sensation is experienced, and indeed every function of the body is performed. Without their recognition by the Brain, the ray of light might strike the eye, but no vision would result - sound might reach the Ear, but no audition would occur - odours the most fragrant might perfume the atmosphere, but would not be perceived - sapid substances the most delicious might be placed upon the Tongue, without being relished.

The Spinal Marrow and Sympa-

thetic system are the sources of all involuntary motion receiving and reflecting impressions through their afferent and efferent nerves. The Brain on the other hand, originates all voluntary motion. The peripheral extremity of a sensitive nerve being stimulated, the impression is communicated to the sensorium. It is then recognized by the perception and the will through the agency of an unknown force termed, 'vis nervosa', excites the muscles requisite for the performance of the corresponding act.

In addition to these functions, possessed by mere sentient creatures, man is endowed with a higher order of faculties viz Intellect & the moral sentiments. True in the brute creation, we occasionally perceive some approximation to a manifestation of intelligence;

but Animal instinct sustains no more relation to Reason, than the faint glimmerings of early dawn bear to the brilliant scintillations of the 'Day King' when at his Zenith.

The faculties of the mind have been defined by Dr Rush to be Understanding, Memory, Imagination, Passions, Principles of Faith, Will, Moral Faculties, Conscience and the sense of Deity. Their principle operations, according to the same author, are Sensation, Perception, Association, Judgement, Reasoning and Volition.

Between these elements like those of the Physical Constitution, there is an intimate relation. A deficiency or impairment in any one will produce discord throughout the entire organ. The mind has been beautifully compared to ——

"A Harp, whose chords elude the sight,
Each yielding harmony disposed aright,
The screws reversed; (a task, which if he please,
God in a moment executes with ease)
Ten thousand times ten thousand strings go loose,
Lost till he tune them all their power to use."

Our knowledge of the nature of the Mental organization is very limited. All our information is derived from the observation of phenomena manifested through the external organs. But that man has within him an intelligent principle, which enables him to analyze, compare and judge - to determine dependencies and investigate cause and effect, is sufficiently evident. These functions could not be accomplished by any material agent how refined and sublimated so-ever it might be. We can not conceive that any process of refinement would endow

an atom with properties essentially different from those possessed by a collection of such particles. The Chemist in his laberatory, may analyze compounds and reduce them to their elementary states; but here the process is arrested. He can develop no properties in an atom not incorporated into an accumulation of those atoms. The converse of this axiom is also true. We must either regard matter as essentially intelligent or unintelligent. Matter can not be intelligent as a whole without being intelligent in its component parts; for a collection of unintelligent particles can never produce an intelligent mass. But if matter be intelligent in every atom, we are constantly presented with the paradox of unintelligent compounds resulting from a conti-

nation of intelligent elements. Hence if there be an intelligent principle in Man, it must be immaterial.

But notwithstanding the mind exists independent of the Brain, its functions are performed through the instrumentality of that organ. It is to be presumed, that the performance of so delicate an office would require a delicate organization; and this we perceive Nature has provided. In other regions of the body, she has displayed great skill, but here is the most beautiful exhibition of her exquisite mechanism. The impairment of this agent may & does prevent the exercise of the faculties upon the same principle, that the derangement of a piece of machinery would prevent its action, although the motive power were present. Thus in the

case of the Idiot, the mind may be perfect, but the absence or imperfection of some essential portion of the Brain precludes its manifestation.

We have already demonstrated the mutual dependence of the Physical organs; also that the elements of the mind must act in unison to effect the proper performance of their office. It remains to examine the relation these two classes of elements sustain to each other.

The connection between mind and matter is most beautifully illustrated in the expression of mental emotion upon the countenance. When the mind is at ease, disquieted by no corroding care nor anxious thought, the expression is serene and tranquil. But let the dormant passions be aroused and behold what a transformation! The calm seren-

ity is supplanted by the dark, forboding frown - the contracted brow - the compressed lips - the fiendish scowl - the malicious grin - the contemptuous sneer, all produced by different muscular combinations acting under powerful mental excitement.

But it is in morbid conditions that this intimate relation is most clearly demonstrated and in none more so than the various Febrile affections. They are frequently attended at the very commencement of the attack with general functional derangement. The contractile power of the Heart is temporarily augmented. Hence the blood is propelled with greater velocity through the system tending to involve every organ and impair every function. Digestion is disordered, Respiration embarrassed,

the muscular system debilitated and the skin dry and parched. As the disease progresses, the functions of Relative life are implicated. Delirium or Coma ensues accompanied by a perversion of the mental faculties. The patient is either morbidly sensitive or deprived of consciousness. In short there is a general deviation from the healthy standard, all resulting from a local cause.

Again, we frequently observe convulsions produced by irritation resulting from Dentition, reducing the patient to the most imminent danger and frequently involving life.

Upon examination, we will ascertain that disturbance of the mental functions equally affect those of the Physical economy.

In Apoplexy, the loss of conscious-

ness and voluntary motion - the stertorous respiration and the slow, full pulse indicate the injury both the Animal and Organic functions have sustained. A similar result is produced by mechanical pressure of any description; but upon the removal of the cause, both the Mental and physical organizations resume their respective functions.

This dependency is further illustrated by those cases of frequent occurrence, in which powerful moral & intellectual impressions terminate seriously. Excessive grief, sudden alarm, startling intelligence, great mental exertion, have all been thus attended. If death has not closed the scene, consequences even more afflicting have in numerous instances resulted. How frequently does the glaring eye - the demoniacal

expression, the distortion of features, the incoherent ravings announce the Maniac in his sad narrative is related. Even among those whom we regard as rational - those with whom we are in constant communication - how often does the pallid cheek - the emaciated form - the desponding tone present indubitable evidence of the existence of a malady too potent for the successful operation of remedial agents.

From these premises we deduce the inference, that the preservation of health depends upon the maintainance of the natural relation between the mind & body. Nature dictates that both should be nourished. The former, by a judicious amount of study, and reflection, the latter, by suitable aliment, exercise

and repose.

It is seldom we witness a model, intellectually and physically in the same individual. This is in a great measure attributable to the neglect of one or other of these admonitions. Those, who attain the greatest excellence in one are very liable to be deficient in the other from want of exercise.

A full development of both mind and body require a rigid enforcement of these Laws. In proportion as these are observed, will the Mental and Physical constitution be invigorated and life rendered desirable.

Those, who comply with the dictates of Nature will receive her rewards. If she be unable to obtain the ascendency over Death. If she be incapble of sitting at the door of the Sepulchre and recussi-

tating those, from whom the vital principle has fled - she can yet accomplish much. Her encouraging voice sustains the fainting spirit, Her gentle hand and artistic skill repairs the damages of accident and age - By implicit obedience to her directions, we may avoid the jutting Scylla on one hand and the yawning Charybdis on the other, as we traverse the vista of life and ultimately attain to a ripe maturity.

An
Inaugural Dissertation,
On
Concussion & Compression,
Submitted to the Examination
of
The Trustees, Regents, & Faculty of Physic,
of
The University of Maryland,
for
the Degree of Doctor of Medicine,
By
Dickson Dent,
of
Howard County
Md.
A. D. 1855.

Gentlemen.

If nothing more than a grateful appreciation of that care & attention, you have ever found it lavished upon me during my Collegiate course, was required to furnish me with a subject worthy of more earnest, I could with lip diffidence & hesitancy offer you this most imperfect production; — but it is known to all, that the Science of Medicine is not acquired in a day, nor, does the knowledge of Books, alone, form the Physician. While the Mind of the Student, here, is forming a foundation, upon which in after life he may rear a noble edifice, he meets with much to discourage his exertions, & cloud his judgment — the doubts & obscurity surrounding Medicine — the conflicting testimony & opinions of eminent Authors & Practitioners — the numerous multitude of diseases — the control that age, sex, habits & seasons have upon these — the difference with which they affect

different persons or different diseases the same persons and the remarkable uncertainty of the action of medicines upon these diseases — each still tend to confuse and lead him astray, who is still bewildered in the arms of his Alma Mater.

Of the numerous subjects that have presented themselves to my consideration, I have made choice of the diagnosis of Concussion, as distinguished from that of Compression. And, here, let me remark, that, it is not my intention to enter minutely into a description of the symptoms, course, & terminations of injuries resulting from these two conditions, for this would be useless & unnecessary. Such a course would prove tiresome to you & show but little reflection or judgement in me. No is it my object to examine the different theories Authors have put forth, for even if I had the time or inclination, I have not their works in my possession. As I take it, the object you have in view in requiring a thesis

from him who antipodes a degree, is to discover whether amid the chaos of opinions, sentiments & theories with which the illy-bred medical abounds, he is sufficiently sound to save from so much conflicting testimony, those truths which are "immortal," & which whether he accomplishes the task or not shall end in my his many labors - lies far as concerns myself, I do not anticipate the same difficult result. I merely offer the opinions of those wise skilled in such matters, & my own reflections be they as much at fault as they possibly can be.

Concussion is that effect produced upon the brain and its membranes by external injuries; such as falls, blows, & sudden wrenchings or commotions. The symptoms in mild cases, according to all authorities are want of motion, consciousness, & sensibility; a vague state of the mind of amazed, which relapse immediately after; an uneasy sleep with difficult breathing;

an intermittent pulse with cold extremities after reaction, gradually, compression, sleepy for some hours afterwards. In more violent cases, "the patient is perfectly insensible, the breathing low, sometimes only a sigh drawn at long intervals, & the pulse scarcely perceptible."

Compression, on the other hand, proceeds from an extravasation of blood, pus, serum, or the skull, with depression, or suppuration within its cavities. Its causes are the same as in Concussion. Blood extravasated, may be either within the cranium, or dura mater, or between the latter membrane and arachnoid, or in the space of the pia mater, or under this membrane, in the space, in the substance or cavities of the brain." If the blood lies between the cranium or dura mater, it may exist at any part of the skull, & if at the base is generally fatal. If it lies between the dura mater & arachnoides, it does not cause any great degree of pressure, from its being

widely scattered about, or apply quantity is or a little. It is circumscribed when within the substance, or ventricles of the brain, & if it be situated within the cranium it is also widely diffused (Brodie). In symptoms of Compression from extravasated blood, we find the person asleep, or dozing, which follows a rupture of a vessel within the cranium. After concussion stunning, & in all, this pain is gone. The temperature of his body is diminished, & the pressure still increases, he becomes more confused, & insensible. His breathing, then, is now slow, interrupted & stertorous manner. His eyes are stay open, the pupils dilated & immovable. His limbs are relaxed, his pulse slow, & is less subject to intermission than in case of concussion.

In Concussion, vomiting seems to be an important symptom, & generally occurs among the earlier ones. It probably results from the stomach being brought into the circle of morbid movement solely through

the brain by means of the sympathetic nerves, in very slight cases, it does not occur, as the brain, then, is not sufficiently disturbed to bring this nervous excitation, nor in very severe cases, as the paralysis then, it does, is quite sufficient to suspend its action. This latter circumstance in the beginning of some cases produces a torpid state of the alimentary canal & its natural consequence constipation, but when the patient has somewhat recovered the shock, an involuntary discharge occurs. Another diagnostic sign between concussion & compression, is the different state of the temperature of the body below the head. Dr John Dill states "that, in some fatal cases of concussion, where I could discover no lesion on dissection after death, the patient's skin was cold from beginning to end; & whenever there was effusion of blood, or depressed bone, the skin was of the natural temperature, & in some cases even rather above it." Now if this be so, may it not want

(for he pretends to give no reason but rather invites attention to the subject) from the capability of the nervous System, to exert an influence upon the contractility of the whole muscular system, so as not only to impair directly, & instantaneously, its power, but even so destroy it, that death immediately results, & irritability subsequently remains! If such be the case a sudden & violent concussion of the Brain, & Spinal Cord, may occasion the immediate cessation of the heart's action, and hence syncope immediately results. But in extreme cases of extravasation, although compression may affect the action of the heart, yet it does not produce total interruption, but causes, its action to be less frequent & feeble than natural. Thus totally in concussion, being completely suspended, the body may soon become cold, whereas, in compression the circulation still going on, "the skin may be of the

natural temperature, & in some cases, even above it.
In extravasation, the circulation may still continue steadily & fully, & the surface of the body may become colder than usual, producing, what is called the cold sweat upon the forehead & other parts, but even here, the loss of heat is gradual; or an extravasation may be so instantly, & so forcibly made, that, sense & motion are immediately lost, & death is the consequence, & it may also happen, that although an extravasation may not possibly have been made at the moment of the accident, the first effect may have been owing to concussion merely, yet a quantity of blood being afterwards effused, some symptoms of extravasation be appear, — in these two cases, the cooling of the body is quite as likely the result of concussion as compression, for both results being so closely allied, the diagnosis between the two, remains a matter of extreme difficulty

The state of the pulse in some cases of concussion, is at first intermittent, feeble, & irregular, & perhaps scarcely perceptible; indeed in some cases, it is entirely so, as far as the touch is able to discern, and in milder cases, feeble, & intermittent, though any exertion will quicken it. In compression, the pulse is slow, & full. The reason is, that in the former, the stroke responds the heart's action; & consequently pulsation; while in the latter, the extravasated blood acting as an irritant, induces an increased flow to the brain. A very interesting case in point, that came under the notice of Prof. Smith, & was related by him to his class, I will give, as an illustration. An old man, several years ago of this city (Philad.) received a blow on the side of his head, inflicted by a piece of stick of ordinary size, in the hands of a medical student. The blow was slight & not intended to do

ceiving injury, but the man instantly fell was insensible, & though reaction occurred shortly afterwards, the symptoms of compression increased, and he died in the course of four or five hours after. On examination of the scalp, there was scarcely found an impression of the blow, yet, there must have been a ~~displacement~~ commotion of the brain, & probably a slight lesion, but not sufficient of themselves, to have produced death so suddenly. On enquiry, it was found, that, the habits of the man had been intemperate, that he had been on a frolic the day before, & that he was in a passion, at the time of the infliction of the blow. His system thus being in an highly irritated state, & consequently predisposed to apoplexy, the blow acted as an excitant, causing a flow of blood to the brain, which resulted in his death.

"Difficulty of breathing & muscular paralysis are of

rare occurrence in Concussion but common in Compression." The pupils in Concussion, are sometimes contracted, sometimes dilated, & not always insensible to light, while, in Compression, they are dilated; & insensible. But, even in the latter, this symptom is exceedingly difficult of diagnosis, as in some instances of compression, they are contracted, while in others, dilated, where, the injury is nearly of the same nature, & degree; & again, in the same patient, one pupil may be contracted, while the other is dilated & so on.

The question here may be asked, how, is death, in Compression, produced by extravasation? Here, the functions of the brain are gradually impeded, & consequently the system does not receive its due nervous influence. How does the heart become unable to propel the blood through the system, or do the respiratory system by nerves become paralyzed, & thus prevent the due aeration of the blood?

In the case of the old man, previously cited, I conclude, that, death followed from increased flow of blood ~~into~~ the brain, & we find in many cases, that, although pressure upon the brain, does affect the heart, yet, its action, though less frequent, or feeble, is not actually interrupted. We also know, that if a portion of the skull is uncovered, together with the dura mater, the brain, which is very vascular, will protrude through the opening, on account of the flow of blood to it, engorging its vessels, & thus causing it to be forced out. Now, on the other hand, wherever we find hurtful pressure on the brain, as from sabre wounds, gun shot wounds ~~from~~ of, skull fractures, there results paralysis. When insensibility is produced, the voluntary muscles are paralyzed, & we find all the symptoms of paralysis existing. The patient lies motionless, in any position he is placed — the bladder is incapable of contracting & becoming distended

with urine & the relaxation of the sphincter ani allows the involuntary discharge of the feces. In time, the muscles of respiration become affected, also. The patient's breathing is difficult, & the diaphragm contracts, at longer & longer intervals, until respiration ceases altogether. Thus we see, that in such a case, death follows from paralysis of the muscles of respiration, related, through the respiratory system of nerves. Now, it would seem, that death follows some other causes, & so it certainly does. In the first, we have the increased flow of blood, increasing the pressure, already existing there, & in the second, two causes, operating conjointly, to produce death, one direct, which is compression, the other indirect, i.e., the effects of the impure blood affecting the brain.

The paralysis of muscles on one side of the body, resulting from an injury on the side of the

head of posite, is a curious diagnostic point of compression, & physiologists ascribe it to the decussation of the cerebral fibres in the medulla oblongata; the anterior pyramids, mutually changing sides, as they pass out of the cranium. An apparent anomaly exists in palsy of the face, which obeys the general law, notwithstanding, that, the fifth pair of nerves, & the portio dura of the seventh, arise from nuclei, above the point of decussation. It, there can, I think, be little doubt, that, these nerves, will be traced ultimately, to a lower origin; if so, they may not be considered, as having been already, thus, traced by Sir Charles Bell, & Mr Solly. There is some difficulty, however, in relation to the cerebellum. The fibres of this portion of the encephalon do not decussate; yet the palsy which follows lesions of its tissue, obeys

the general law, in occurring upon the side, opposite to the lesion. This apparent anomaly is explained, by the connection, between the fibres of the anterior pyramids, & the pons varolii, which consists chiefly of fillaments from the cerebellum. The shock, producing the paralytic phenomena, very probably passes in this direction & the paralysis does not depend, immediately, upon injury of the cerebellum, but upon that of the central fibres in close connection with it." With regard to the treatment of concussion, there are three conditions to be provided for: viz, the insensibility of the patient & collapse; inflamation of the brain; & the restoration of any faculties, which remain impaired by the injury. Surgeons are now so much of one opinion as to the remedies to be employed in effecting these. that it is scarcely worth while

for me to transcribe them here. ~~It seems very~~ ~~that~~ The only difference entertained, is when to employ stimulants, when to bleed, how much blood to take, & how often to repeat venesection. It seems to me that on this point the Kindle is so clear, explicit & correct, that I may be pardoned for quoting his own words. There are, he observes, sufficient reasons why we should regard that condition of the system which approaches syncope, as being most conducive to the patient's welfare, & why we should wish to prolong, rather, than abridge the period of its duration. The same state which gives rise to the symptoms of concussion, frequently occasions the rupture of some small vessels within the cranium. The same state of the system which produces an enfeebled action of the heart, is calculated to prevent the ruptured vessels from pouring out their contents

and the longer it continues, the less is the danger of internal hemorrhage. If we excite the action of the heart with wine & ammonia, we may bring on symptoms of pressure of the brain. If, on the contrary we watch the gradual restoration of the pulse & blood at the proper moment, in quantity, sufficient to keep down the action of the heart, we may keep down extravasation & as the state of depression is followed by one of excitement, it is another strong consideration in favor of avoiding stimuli & having recourse to bleeding in time to prevent the heart's action from becoming too violent. (Med. Chir. Trans. vol 14, p. 377)

With regard to the employment of the trephine, I shall endeavor to state, in as few words as possible, the opinions of those skilled in this operation. The older surgeons were in the habit of trephining on all occasions and of

performing the operation, repeatedly upon the same patient, so as almost to make "a sieve of the cranium." & as Prof. Smith observes, "it is truly wonderful how many cases recover in spite both of the Surgeon & of the affection." This operation, in the present day, is only had recourse to as a dernier resort. In many cases it requires a considerable exercise of prudence & judgement to tell when, & where, to perform it, for numerous cases are on record, where patients have recovered under the most unpromising circumstances, without the trephine. The brain, when compressed by the cranium, accommodates itself to the pressure & though the symptoms, at first call for the trephine, yet such cases have ultimately recovered without its use. So also has extravasated blood been dissipated or absorbed by assisting Nature in the dissipation by draining off the circulating fluid through

phlebotomy. The head may show no external marks of violence, & yet, alarming symptoms may occur. In such a case should we use the lancet? and if so at what point. Pitt, Dessault & others do not recommend it in these cases, but advise free venesection. When the situation of the blood is determined, & its quantity is sufficient to interfere very materially with the functions of the brain, when that blood is judged to be in a fluid state & exists between the skull & dura mater, when the blood is supposed to flow from the rupture of the meningeal arteries, when the insensibility continues, & the lungs become clogged with mucus, when the bones crepitate under the fingers & when the blood losing its vitality acts as a foreign substance — under these circumstances, variously occurring in different cases, the lancet is demanded, but it is an extremely dangerous operation. "And you cannot venture to pronounce or promise that it will succeed even in the most apparent slight cases"

Having given in detail the symptoms attending Concussion & Compression of the Brain I propose, as a conclusion to this article to draw the striking points of difference between the two. In Concussion the prostrated condition of the patient presents all the phenomena of <u>anæsthesia</u> – as his contracted pupils, his loss of sense with remains of muscular power, ~~remaining sense in~~ evident from the fact that he is able to move his extremities & from the moans that follows when anything is thrown into his stomach. In Compression on the contrary we find the patient lying insensible, his pupils dilated, his breathing stertorous & no moans evoked when stimulants are received into his stomach, thus it follows that the pathological condition of the nervous system presents us with some striking diagnostic points between the two for we see that in Concussion, the Brain is not materially impaired while in Compression it is organic, so although the nervous stimulus still keeps up the functions of the body yet the organs themselves are not in a condition to respond.

An
Inaugural Dissertation
On Inflammation

Submitted to the examination
of the
Provost Regents and
Faculty of Medicine
of the
University of Maryland
for the degree of Doctor
of
Medicine by
Calvert Co
Md

Inflammation

The occurrence of inflammation is so common and its more prominent symptoms so familiar that it has from antiquity been considered as one of the most important elements of disease; and it has so engrossed the attention of pathologists that other important elements have been overlooked and this oversight has not only retarded the advancement of knowledge with regard to the other elements but has rendered the subject of inflammation itself less intelligible by excluding the consideration of some of its important parts.

Inflammation is by far the most important element of disease it constitutes an essential part or is the chief seat of danger in most serious diseases, therefore this element of disease should be considered with particular care.

Inflammation may be defined to be that

morbid condition which is characterized by redness, heat, pain and swelling.
This like every other definition is imperfect
There are many cases of inflammation in which one or more of these symptoms is absent. and there are other phenomena that might be added with some degree of propriety such as a modification of the secretory and nutritive functions. We, shall proceed to the consideration of the four characteristics of inflammation beginning with heat
This depends upon increased afflux of blood, and to augmentation of the function of calorification in the part. This phenomenon is most observable in inflammation seated in parts distant from the centre of circulation. and becomes less, and less observable as it is seated nearer the heart, according to Hunter the temperature of an inflamed part never exceeds that of the heart

but it certainly exceeds the temperature of the blood between the heart and the seat of inflammation; as can be proved by a thermometer or by the application of the hand.

Pain — This symptom of inflammation often precedes that condition, denominated inflammation occurring in irritation and sometimes absent in well marked cases, and when present its severity is by no means proportionate to its intensity. It varies in character according to the state of the constitution, the part affected and the cause which produces it; thus it is tingling in the skin, throbbing cellular tissue, sharp and lancinating in serous membranes and merely amounting to heat or soreness in the mucous membrane and extremely dull and oppressive in parts supplied with ganglionic nerves as the kidney and testicle

Parts that exhibit but little sensibility in health become exquisitely painful when inflamed such as tendon and ligament. Pain often occurs in parts remote from the seat of inflammation as in the right shoulder from inflammation of the liver, in the knee from inflammation of the hip; The causes of pain is some unexplained disorder of sensation and probably irritation caused by pressure of the distended blood vessels, thickening of the neurilemma. While general sensibility is exalted special sensibility is attended by inflammation. In the irritation that precedes inflammation special sensibility is rendered more acute. Swelling of inflammation depends upon the influx of blood, the effusion of serum, blood, pus, and to the organization of new parts. This symptom varies according to the intensity and seat of inflammation

being slight in mucous membranes and great in glandular structure as in parotid testicles and lymphatics It may be circumscribed or diffused according to the circumstances of the case

Redness is often the first symptom that makes its appearance; which ranges from a slight discoloration to a deep crimson according to the intensity of the inflammation, its situation the state of the system and the nature of the cause; When inflammation is acute the redness is of the bright scarlet hue of arterial blood when chronic of a dark venous hue and in certain specific inflammations purple or copper colored, There are exceptions to this division; Sycosis in common inflammations redness is diffused and gradually lost in the surrounding parts; whereas in some forms of herpes it is circumscribed, There are several terms used to express

the appearance of inflammation according as it occurs in the capillaries, in veins and arteries or in the villi as capilliform ramiform and punctiform. The causes of increased redness are the augmentation of calibre of the blood vessels increased quantity of blood in the part; accumulation of red globules in the smaller vessels and in part to the speedy formation of new vessels according to the observation of Hallenhuner and others, and to the passage of arterial blood into the veins as first advanced by Winter and subsequently proved by microscopic examination. Having detailed the four characteristics of inflammation, we now proceed to examine in what respects inflammation differs from congestion and determination.

From congestion it differs not only in the greater intensity of redness, heat, pain and swelling but to the condition of the blood

veins and the earlier and more abundant effusion of serum. The strong beating of the arteries, the increased quantity of blood in the veins clearly show that there is increased motion instead of diminished motion as in congestion. In determination the arteries become enlarged and more active, there is corresponding enlargement of the veins and the whole vascular system becomes the seat of increased vascular action.

Inflammation blends the characters of both congestion and determination.

That there is determination may be proved by observations and experiments by Dr Wilson and others prove that the arteries are enlarged. This enlargement is attributable to diminished tonicity in the affected arteries.

That suction of the blood through the affected part is increased is proved by experiment of Dr Lawrence

having opened the veins at the same time in both arms of a patient, who had inflammation in one hand; he found that a much larger quantity of blood flowed from the affected arm; These experiments prove beyond a doubt that there is determination but this is not all, if it were, there would be no distinction between determination and inflammation. The greater redness, heat and swelling and other characteristics plainly show, that inflammation is something more than mere determination

One great difference is the obstruction in the vessels pointed out by microscopic researches of Thomson, Hastings, Patterson and Marshall Hall; whilst the tissues surrounding become the seat of increased vascularization. This obstruction did not escape the observation of Cullen, he ascribed it to spasm of the extreme vessels

Within the Physiologists, the workings of the capillaries which he assumed to exaggerate them from the transmission of blood
Hunter to paralyzes and Wall to obstruction. These theories limit the blood vessels as the essential seat of inflammation and that it was some peculiar morbid action or condition of the vessels which gave rise to the phenomena of inflammation
We know, that inflammation is not a disorder of any one element of tissue but that the tissues are involved as a living whole and all their functions simultaneously. Hallier and some of his followers assailed the circulation, in part to sustain hypothesis, functions of vital attraction and repulsion by which the blood is drawn into and repelled
Consequently, disorder of attraction and repulsion are essential part of inflammation

These theories have been explained with ability by Dr. Hosack and others,

This hypothesis is ingenious, plausible and totally devoid of proof; I think all the phenomena of inflammation can be explained satisfactorily without the theory of attraction and repulsion as with it and if so it is needless and unphilosophical to assume the existence of them

We have seen that inflammation blends the characters of congestion and determination therefore it may begin either in congestion or determination.

When an irritant is applied to a part the vessels are variously affected, as relation to their diameter being sometimes dilated and at others contracted; according to the observation of Wilson. Philip, Thomas Hastings and others. When the vessels are contracted by application of an irritant

they soon dilate and it is not until dilation that the phenomena of inflammation are manifest. Now after the vessels have dilated the blood begins to move slowly, particular in some of the vessels where the current was accelerated and strong, its motion becomes oscillatory or vermicular. It is obviously the stagnation or tardy flow of blood in the most engorged capillaries in the midst of surrounding increased flow, that most characterize inflammation. An important question is, what is the cause of this stagnation? The cause must be either in the dilated vessels or in the blood or both.

There is discrepancy in the minds of pathologist as to the condition of the dilated vessels; one party maintaining that the vessels are in a state of active dilation particularly in the early stage of inflammation or

and that the phenomena depends upon excessive exercise of the vital properties of the parts. This opinion suggested by Van Helmont and Stahl was adopted by Hallier, Hunter, Cullen and Broussais likewise by many pathologist of the present and past age; that of debility was advanced by Vecca of Florence and advocated by other pathologists but did not attract much attention until supported by Wilson Philips; supporters of the doctrine of debility hold that in inflammation the vessels are debilitated either directly or indirectly, by the exciting cause and yield to the distending force of the arteries and heart. They likewise say the only way in which the vessels exhibit increased action is by increased contraction.

This theory is ingenious but fails to explain some of the phenomena, for instance

as increased heat of the part in a retrograde
of blood to the centre of inflammation and
according to this theory greater the debility
greater dilitation which is not the case
and we would not expect much advantage
from the use of sedatives. The greatest
weight of evidence is in favour of the theory
which ascribes inflammation to exaltation
of the vital properties of the part.
All of the phenomena of inflammation
have the character which we would
expect from increased vital action.
That there is increased quantity of blood
passing through the inflamed part,
as proved by the discoloration of the tissues,
increased general irritability, the rapid
organization of new tissue, and increased
heat which uses alone the temperature
of the blood between the part inflamed
and the heart.

The chief objection to this theory is the stagnation or tardy flow of blood in some of the capillaries, this seems inconsistent with increased action, the cause of this stagnation or relaxation has always been a stumbling block to pathologists, some ascribing it to the constriction of the blood vessels, while others to the state of the blood.

The most plausible explanation is this one, that resides it in part to the fibres, and in part to the vessels

Atony of the blood vessels is one of the chief causes of congestion and congestion is essential to inflammation though it may be attributable in part to a new tortuous and inelastic state of the vessels, by removing that tone by which the vessels best maintain the vacuity and tension for the transmission of blood

This is illustrated by an experiment
one of Reads enema syringes was adapted
to a tube with two arms to one was fitted
a brass tube two feet long having angles
in its course, and to the other a piece
of rabits intestine twice the length of
the tube and of a calibre when distended
twice that of the tube. The gut was placed in
curves and coils avoiding angles,
The discharging ends of both was raised
to the same hight. When they were
filled by the piston it was found
that the metal tube discharged from
two to five times more than the intestine;
the difference being greatest when the
strokes of the piston were most gentle
and sudden. This experiment proves that
a relaxed and tortuous condition of rectum
offers great resistance to the revulsive
fluid

This experiment of Cancel exaggerates what takes place in the blood vessels but the same cause is active.

This is one cause of retardation of the current but there is another and more essential cause not in the vessels but in the fluid itself. This was first observed by J. Hunter then by Gendrin and others. Marshall Hall was the first who attributed obstruction of the vessels to adhesion of the globules to the walls of the vessels and since the subject has been investigated by other pathologists who confirming his observation. Parrouille states, from his observation with regard to the mechanical cause of stasis, which stands between the nervous and the walls of the vessels that the fluid particles sometimes get into the third layer and either remain fixed there or move onwards

more slowly than the rest of the tissue.
The observation being repeated by
Tyndall and Williams the fact
that it was not the red corpuscles or
epithelial cells that thus adhered or
rolled slowly along the walls of the vessels
but white or colorless, clear, transparent
globules of matter. Williams states
that he had never seen a single epithelial
cell adhering to the walls of the vessels
and whenever one was arrested in its
course it was found to be surrounded
by one or more of the colorless mucoid
globules. But what appeared to him
most remarkable in the report of
these white globules was the great
difference in their number under
different circumstances. In long
frogs and in those which he pinched to
confinement they were always present

in great numbers but in health, adult frogs placed under the microscope with as little handling of the net as possible there were only a few to be seen. The frog he has watched for two minutes without doing any; naturally lower was very thin but clear and all the blood corpuscles in the larger vessels seemed to move at the same rate of speed. It is under these circumstances that the effect of irritants or mechanical injury was first seen. By pressure of the finger on the net partial stagnation was produced in many of the vessels and when this reached to the returning current the walls of the vessels were seen studded with white globules which many of the same kind rolled over them slowly in the direction of the current. The same effect is produced upon the application of any thing

that causes irritation or stimulation.
If the stimulus used be strong or long applied the number of sticking globules becomes so much increased as to prevent the passage of red globules and these becoming implanted in increased number give to the vessels a uniform and deep red color. Williams says he has varied these observations in a great many ways and have always found that considerable or continued irritation of the vessels in the frog invariably to be attended with the appearance and adhesion of colorless globules.
The chief cause of obstruction is the presence of an increased number of lymph globules and their adhesion. The origin of these white corpuscles is involved in some doubt, some regard them as blood corpuscles in a state of solution or disintegration. Drs Berry and Allison think that the

velocity corpuscles which have formerly been regarded as lymph corpuscles are formed from the central portion of the blood corpuscles; they consider them to hold an intermediate position between the true red corpuscles and the greatly modified forms of corpuscles which in their turn are the basis of the tissue as well as of pus and other globules. The most probable opinion however, is that the white corpuscles of the blood are identical with the lymph and chyle corpuscles; and all in the opinion of Dr. Carpenter are connected with the elaboration of plastic fibrin which must be constantly drawn off by the nutritive processes and therefore require to be reproduced. According to the microscopic observation of Messrs. Addison Williams Gulliver and others the productions of white corpuscles

in an inflamed part is partly owing to the attraction of white granules towards the seat of inflammation and partly to actual reproduction of new corpuscles in the inflamed part. Williams says it is not difficult to explain their production if we consider the combination of causes operating in the inflamed part,
The blood is highly charged with fibrin which need only a further process of oxidation to assume the solid of the dulsed; this process is supplied by the current of arterial blood which rushes into the obstructed portions and brings the red particles, the oxygen carries in such possible contact with the blood liquor as forms the transfer of oxygen to the fibrin contained in it. As the fibrin becomes oxidized and consolidated into a granular form; and more readily

around the oily molecules always diffused through the blood liquid; and these form the nucleoli visible in the larger granules. These colorless corpuscles have a tendency to adhere to the walls of the blood vessels. Upon what this depends is not well understood, some ascribing it to vital attraction others to physical properties of adhesion. The production and subsequent adhesion of these pale corpuscles are the chief cause of obstruction in inflammation. Inflammation at first exalts sensibility and contractility but after obstruction they are partly or wholly suspended in the part obstructed. The results of inflammation are, Resolution, Suppuration, Effusion, Adhesion, Gangrene. It is seldom that one occurs singly for in the mildest form; if it present for any time there is effusion of lymph causing thickening

or increased density

Resolution is the terme applied to the cessation of all the symptoms, when the effusion is so slight or transient as to cause little or no inconvenience Resolution may occur spontaneously or from treatment or by extending to other parts There is always a tendency to resolution although this may vary from few hours to many days or weeks according to the intensity and various other circumstances. Resolution of inflammation may occur spontaneous in slight cases or in consequence of treatment or by its being translated to some other part as occurs in certain specific inflammation Gout Rhumatism Erysipelas &c

Effusion is a pouring out of some of the constituents of blood this can not be considered as one of the terminations of inflammation though it may diminish its intensity

at the same it may not be devoid of its mischievous consequences. The fluid effused may be serum or serum and fibrin or blood The fluid may be absorbed or partly absorbed and partly organized, It is by this process of absorption and organization that adhesion is effected,

Suppuration is the secression of a yellowish opaque creamy fluid The circumstances which determin suppuration are its intensity duration excess of air to the part and the condition of the blood

Gangrene the death of the part, known by part becomeing gradualy cold and insensible Causes intensity of inflammation its malignent character and condition of blood

Varieties of Inflammation

Although there are many variations in the progress of inflammation

in different instances which can not be reduced to any general head, yet it is also ascertained that there are varieties which admit of being classified and generalized and the causes of which can be assigned; as in the following varieties, phlegmonous, erysipelatous haemorrhagic, diphtheritic

The term phlegmonous is applied to a variety of inflammation which ends in the formation of circumscribed abscess. The type of this is Athlone and when diphtheritic occurs the system is violated by a deposit of lymph against its invitation; when fever is combined it is of a strong inflammatory character

Erysipelatous. This variety is distinguished by its tendency to spread along the surfaces, by its color which is more lived red than other external inflammations

by its producing vesicles but with little or no effusion of coagulable lymph and by the fact of accompanying iris which bears no relation to the extent or intensity of the inflammation. Particular this is characterized by the rapid formation of false membrane

H. Hæmorrhagic, in most inflammations there is a slight extravasation of blood but sometimes there is so much colouring matter in the inflamed tissue as to difficult to determine whether it is inflammation or haemorrhage

This variety is found connected with chronic diseases of the liver or kidneys. Sanguineous inflammation is characterized by asthenia and exhibits many deviations from common forms of inflammation. Vaccinia is used by medical writers in two senses 1st to express the constant

of a peculiar constitutional disease which possesses certain characteristics thus a relaxed state of muscular system weak circulation, imperfect nutrition a pearly whitening of eye and teeth tumid epiphyses large wrist joints with irregularities of function &c. to designate certain diseases occurring in scrofulous habits, affect which are inflammatory either either at beginning or end; Scrofulous inflammation which may be exemplified in lymphatic glands: one of its most common seats When common inflammation affects these glands they become red swollen painful with a tendency to resolution or suppuration

In scrofulous inflammation they are much swollen indolent, devoid of pain has little or no tendency

to resolution or suppuration and little influenced by antiphlogistic remedies. Sometimes it seems to inflamate gland becomes red and fluctuating but afterwards soft and wrinkled. Often it burst the skin is thin covered with matter of a cheesy consistence and leaves a ulcer with narrow orifice which throws out indolent granulations and is little disposed to heal,

A

Clinical Report of six cases

Submitted

to the examination of the

Provost

Regents and Faculty of Medicine

of the

University of Maryland

for the degree

of

Doctor of Medicine

by

Francis P. Phelps Jr.

of

Maryland

1853

To

Prof. George W. Mullenberger

I would respectfully dedicate

this thesis.

F. P. Phelps. Jr

Gentlemen of the Faculty,

In conformity with the rules of our Institution it becomes my duty to offer to your consideration a thesis on some subject connected with the science of medicine. Treading upon ground over which thousands have already passed — and to choose from themes which have already been the subject of innumerable essays it would be impossible for me to present any new subject — to originate any new thought — or in any

way to [illegible] from the [illegible] -den by all who have entered the profession from the time of Hippocrates. I have therefore [illegible] several cases of disease occurri-ng within the wards of our Infirmary and although they possess in themselves nothing to distinguish them from instances of like maladies yet I hope they will not be found entirely devoid of interest.

Scurvy

Gonorrhoeal Rheumatism and
Gonorrhoeal Ophthalmia.
Treated by Dr Hellenbergen.
John Walker aged 20.
Cut of mark. Sailor. He
had suffered several times.
Contracted present attack about
20th of March. Ten days after
sight was become inflamed and
exquisitely sensitive to light, on the
following day (31st March) ankle
and meta-tarsal joints were very
painful, so much so that he
was unable to touch foot to ground.
Never had rheumatism or
any kind before.
April 5th Condition as follows.
Gonorrhoea in second stage with
gonorrhoeal papulitis and
gonorrhoeal ophthalmia. The
vessels of the conjunctiva being

much congested and, redder coming over corona. Considerable phlebofarkobit and lachrymation. Left foot much swollen and conformation of joint not visible, and very tender. Right ankle very painful, which incapacitates his touching foot to ground.

Loss ℥x of blood. Put from Hydrg gr x Jallap gr x as a purgative; after which he was to take Tart Antim gr ¼ every three hours. To avoid lock jaw Argent to be drawn around corona glandis. For gonorrhoeal opthalmia. Fort Argent gr x Aq ℥j as a collyrium. Hung Hyd to be rubbed into feet and ankle.

April 7th Better but still very painful. Joints but little changed. Directed to be cupped

back of neck. I prescribed Quet the same.

Apl 10th Much improved. Eye less painful. No congestion and tachycardia. Foot easy and bowels moderate.

Apl 11th Eye much better, no photophobia or tachycardia, foot much improved. Eye less painful. As he complains of the collyrium irritating his eye it was reduced to ½ at Aqua gvi ℥j. Eye continued to improve and on the 13th the solution of nitrate of silver was discontinued, the eye being perfectly restored.

Apl 14th The second foot painful so much so that he barely gets to sleep at night. It was decided to take out at first bathing every third day, use R Tinct Rhei ℥ij Tr Camphor ℥ij

Hydrocyanic Aq ℥ VI. ℥ss every four hours.

April 16th Legs and feet still painful. Swelling of legs much decreased. Ordered tablets of gtt xx together with Iodide of Potassium every six hours.

April 17th Phlegmasia considered to be cured of pain. Gums improved. Tonsils continues nothing to get being done for it. He was ordered Chlorate of Potash ℥ss three times a day. Tablets of Potash dropped. Tablets were to be injected under prepared. A solution of Acetas Plumbi as an external wash. Stop iron 6th and substitute Tinct Argent nitrat which was to be given five times daily.

Apr 21st Tonsils better. Phlegmasis improving. Legs swelling

and redness of penis. Joints much improved since Nitr. argent. Nit. begins to produce its effects. Able to bear weight on foot; still some pain in knee.

Apr 22nd Color of discharge changed from yellowish to whitish. Still some pain when voiding urine. Swelling of knee decreased; pain of foot confined to great toe.

Continue the same treatment.

Bowels not moving, but need for three days no pills had been given.

25th Condition is no well. The gonorrhœa, not flowing very fast. He was injected with nit argent. gr vi Aq. ℥viij of which he got two injections.

29th Pain left the knee and ankle of right foot; able to walk very well; but some pain and tenderness of

ankle. No running since yesterday. Continued Chapman's and injection of black wash.
Apr 30th no pain in head, still some pain and swelling of ankle. He continues to have a yellow discharge. Little burning when passing urine. Continue yesterday treatment. Also anointed joint with iodine ointment.
May 1st. He continued Chapman's drink and mild injection of nitrate of silver two or three times a day. The burning still continues. He was directed to stop Chapman's drink and injection and substitute oil of sandal wood.
Oct 1st Opii gr i. Dose to be taken in the course of the day.
May 13th. He took the pills for two days. The third he omitted his medicine. The burning

commenced having ceased the day previous. No pain except in heel, when he walks.

Jan. 15th Still running, stools of whitish color. No pain in passing urine. He was ordered to continue medicine two days, and omit one. Still some pain in heel.

17th Omitted medicine one day as directed. Running still persists. Ordered to stop potas, and substitute Tab. Cubebis three times a day; which he continued till the 20th when he used in conjunction Ext. Hyoscyami gr. vi Vin Opii ℥j Aq ℥iv. Ol. Ricini and Acid gs to be used three times daily.

Jan. 22 No running to day. Still some pain in heel.

Continue treatment

May 26th. Morning slipped since the end of injection until this morning, when I injected some blood and watery fluid.

Inject twice and continue cubebs.

May 28th. Very slight movement at times. Little pain in rect. Left the house to day.

Acute Rheumatism

Treated by Dr. Thomas

Fairbanks. Seat of Talbot. Colored man in this County. Aet 22. Has been subject to rheumatism from childhood. Three months since he had a slight attack which subsided in about one week. Since that time has been perfectly free from pain till Friday May 4th when after exposure right ankle became swollen painful and red. The same night left ankle and knee became involved.

He entered the Baltimore Infirmary May 12th. In condition as follows. Tongue white and dissolute. Very acute agonizing pain in both ankles and knees. Ankles much swollen red and

extremely sensitive. the slightest touch occasioning the most intense agony. The conformation of knee entirely distorted by effusion in synovial sack. Right bellows murmur. Pulse unfavorable not affected. Tongue moist but covered with a yellowish fur in the centre, but tip and edges red. Much pain in elbow joints. Ordered to be bled xx. also to be cupped over heart, and take the following. ℞ Tinct Colchi zv dij-iv. Vable-spoon full every three hours. Sub Mur ℞ Cj d gr x. Opium powder gr x at night

July 3rd. Left swelling of joints, still excessive pain when moved, knee too uncomfortable. Tongue not so much coated and tip red at tip and edges. Bowels moved freely.

times during the last 24 hours.
Decided to be cupped over loins
and between shoulders. Combined
Colch prepared in compound
tablets & Sulphate of Magnesia
Vinum Antimonialis at night.
Only 14 hrs slept since last night.
Joints much less swollen and
tender. Her whole condition is
decidedly improved.
Treatment the same.
Only 15 hrs slept, very little last night
not kept awake by pain. Swelling
of joints still increasing but can
not be moved without great pain.
Sulphur go. Tongue slightly furred.
Bowels moved twice. Ordered
to continue Colch prepared during
the day and Opii gr i at night
also the following as a local
application. Ung. Hydrargyri
Vinet Aconiti & Chloroform ii

To be dressed on cotton and bound around joints

July 17th Slept well. Joints of normal size and can be moved with but slight pain. Tongue clean and tender to touch. Pulse normal. Slept all last

July 19th No pain in joints, some stiffness in right shoulder, pulse normal. Appetite good. Bowels regular. Ordered ale in bottle gts xx every four hours.

The convalescence was uninterupted and she left July 28th perfectly cured.

Hamilton Nelson.

Located of Stones.

[illegible] in the County [illegible] at his residence. Æt. 22 years. Day laborer. Accounts of his ancestors are [illegible] parents: has never been sick, except that once was attacked with what he supposes was bilious fever during his residence in Virginia. Very temperate in his habits. Has recently been living in a very mountainous section of country. Lives between Little Rock, Pa. and [illegible]. [illegible] breakfast on morning of (Aug 10th) [illegible] from the table. Stated that he was seized with pain in the forehead, vertigo, coldness over the whole surface and inclination to vomit. [illegible]

After walking a little distance, he found himself [illegible], too weak to stand and stumbled with [illegible]. [illegible] after continuing [illegible] succeeded by fever, which did not abate until morning. On [illegible] morning Aug 12th felt much better but at 11 o'clock had [illegible] of chill, which on the day previous was followed by fever. On Wednesday morning took [illegible] cathartic pills which operated twice. Was admitted to the Infirmary on Wednesday Night Aug 19th. Condition as follows. Aspect well. [illegible] fair. [illegible] with brown coating; pulse 120 and feeble; skin [illegible]. [illegible] much of his head and stomach.

Cont. Opt. [illegible] Vin.
Ant. p. Aq. iij. [illegible]
[illegible] while fever continues.
Aug 19th Has been three [illegible]
[illegible] Tongue not
diminished [illegible] Opt.
Pot. Chlorat. [illegible]
[illegible] pt. Pills x – one every 2 hours
rubbed over epigastrium. Sinapism
between shoulders. 6 Oclock P.M.
Has passed [illegible] stools, with little
fever and delirium. Tongue not
insulable – has vomited a good deal.
Better [illegible]
[illegible]
Aug 20 Passed a tolerable
night, [illegible]
delirium [illegible] night. Tongue
still covered with brown fur
[illegible] tongue [illegible]; [illegible]
[illegible] but [illegible], [illegible]
Lit. Potassæ Aq. iv 6 d. Aug 21st

Tinct: Aconiti gtt. ft. mist. tablespoon-
-full every 2 hours.

Dec. 21st Expectoration [illegible]
tongue cleaning; facial features frequent; pulse, numerous and feeble.

Ordered to be bled until marked effect was produced on pulse, and two of the [illegible]
Substituted [illegible]
ft Hilx. [illegible] 2 oz. [illegible] last night. Pulse eight and natural; tongue [illegible]
Ol. ricini [illegible]
2i. [illegible] every 2 hours.

Dec. 22nd [illegible]
this morning. Pulse natural; tongue perfectly clean. Pronounced convalescent, and ordered Infusion of Gentian.

Delaphia River.

Treated by Prof. Parrott.

John Scullion, an Irishman; aet 28.

Seen resident in this country; occupation farming; pallid; general health good. Has been in fort eight hours direct from Mt. Vilaudi all well on board. Includes that for several days before he was confined to bed, he had a general feeling of debility and uneasiness; and considering his condition as consequent upon his exposure he took to bed for the purpose of resting himself. Opd. Sept 1st was seized with a chill and a sense of great debility which compelled him to take to bed; was visited by a physician but does not know what medicine was used.

Sept 3rd Entered the Pallisade Infirmary; Condition as follows

Pain in the back, loins, head and lower extremities, most intense in the head and back; pulse 120; respiration 42; skin hot and dry; vomited on yesterday; vomiting thirst; no appetite; much nausea; bowels constipated; pod feeble; urine increasing quantity; stomach and chest covered with circumscribed eruption of bright red; pt. complained; abdomen tympanitic. Decided to take ℞ Bicarb Potash ℥ss, Aqua ℥vi. Table-spoonfull every three hours.

Sept 7th. In addition to the symptoms of yesterday, he complains of severe pressure in the epigastric region. Dr Emmons ordered him to be cupped over stomach; an injection of oil and water to be administered to relieve his constipation; also ℞ Bit Potash ℞ Gum Acacia ℥i Aqua ℥iii

Tannic acid gtt xij. & abs. powder full
every 2 hours. Ice water for drink.
Sept 6th & Sept. rested last night slightly delirious: pulse 128: respiration
40: tongue brown: bowels total want of
appetite: thirst insatiable: tympanites slightly decreased: stool
constipated, the amount of fluid being insufficient: urine scanty:
Vomited again: continue the
alkaline solution: and give water
acidulated with lemon juice to
assuage thirst. Took another
injection which caused two free
evacuations.
Sept 9th & Slept well and delirious last
night: thirst intense during the
night: calling constantly for cold
water: tongue horribly and can
take no food: pulse 120 and full:
respiration 26: tongue furred: no
bowels or bath: emptied urine: pres-

=ing the night, passes [illegible] some [illegible]
which [illegible]
have disappeared. Coarse sonorous
rattles heard both sides. Respiration
[illegible]
Tongue [illegible] and [illegible]
[illegible] pulse [illegible] 2 hours.
Sept 10th Slept [illegible] and delirious
[illegible] that it was with diffi-
-culty he could be retained in bed.
Tongue [illegible] and dry, tongue
heavily coated with a [illegible] white
fur. [illegible] diminished. he
lies with his mouth partially open,
eyes closed. takes no notice of
anything around him, unless
spoken to, and then answers
intelligently. Directed to be sponged
with warm whiskey and water. [illegible]
have [illegible] [illegible] [illegible] this
Pot.
Sept 11th Slept little last night [illegible]

[illegible] at first time [illegible] the
bowels; pulse 104; tongue moist; tongue
heavily coated but moist [illegible]
[illegible] tendinum; he is so
[illegible] out of a whisper; [illegible] for 6 hours
assuming the [illegible] position
bolster, in a profound prostration;
thirst relieved, but no appetite;
pressure go and pulse increased to
120. Ordered [illegible] 1 oz brandy; 1 oz
opii; [illegible] 1 oz brandy; 1 oz
[illegible] every 2 hours; veins and tongue
anodyne if necessary; [illegible]
Sept 12th. Tongue highly
coated, moist, and has commenced
cleaning from the centre; bowels in
a profound prostration; lies upon
his back; eyes closed; [illegible]
no control of [illegible]
Slept well last night without the
anodyne. Eruption still distinct

At 12 o'clk he was in a profound sleep perspiring freely from exhaustion. Continued the same.

Sept 13th Slept some last night and was delirious for a part of the night. Pulse 84. tongue cleaning from the edges. faeces fluid. Slight subsultus tendinum. urine bath. Same opiate intelligence treatment continued

Sept 14th Night similar to the previous one. pulse 100 soft. tongue dark colored sticky and cracked. Much sordes on teeth and gums. Complains much of thirst. Countenance has never recovered its natural appearance. appetite clearing skin natural. free from all pain. Continue treatment.

Sept 15th. Slept well last night. H. pulse 70: tongue moist with a tendency to clean: intelligence clear: Ordered to stop yesterday's treatment and to take Quinid & iodi. dig. ℞ Acid Sul Aromat q.s. ℞ ab. aq. ounces two hourly. Tongue to be touched with glycerine tr. and tied

Sept 16th. Slept sound during last night. Intelligence not so good as on yesterday: tongue dry: was directed to stop Quinid and take Liq. Potass Iodi. & digitalis ℞ ab. aq. ounces every three hours.

Sept 17th. [illegible] fine: slept well last night and found him this morning sitting up in a perfect paroxysm: tongue moist in a drowsy condition all day: pulse slow and tolerably firm: [illegible]

much flushed: eyes injected: tongue covered with a coat of fur except around the edges, where it is red and smooth: less sordes: heat continued.

April 18th. Slept well last night. Pulse natural: tongue has assumed a more natural appearance, covered with a dirty white fur, but moist. Spots on his abdomen entirely disappeared. Directed to take ℞ Sol. Quiniæ gr. xii, Spts. Mindereri ℥ii, Aq. ℥iv. A tablespoonfull every two hours.

April 19th. Slept well last night: pulse 80: tongue moist and cleaning. Skin moist: bowels constipated for several days: ordered an injection and continued yesterday's treatment.

April 20. Rested well last night: bowels freely moved by the injection of yesterday: pulse slow and regular: tongue coated and cleaning: no

Bread about milk. [illegible] appetite. Directed to take Lumbricoid compound [illegible] gtt. iv. Aqua [illegible] iv. After prompt delivery of [illegible] s. [illegible] 23rd. Left [illegible] well except [illegible] bowels [illegible] fecal natural; tongue clean; little appetite. Directed to take Pulv. Columbo, Iron Arsenate, Soda Bicarb. pt. [illegible] iii on the [illegible] daily.

This patient remained in the house until Nov. 9th. Complaining of tenderness and pain in the right hypochondriac region. He was very severe for which he was treated by counter-irritants and anodyne ointment. He was habitually bound by constipation.

Left the house cured.

Typhoid Fever

Treated by Prof Thomas.

Chas. Gr. Aet 24.

Nat of Germany; has been in this country four months. Of farm near on the railroad three miles from Gallipolis City. Entered the Infirmary Sept 20th. He states he has been sick twenty two days, having been more or less prostrated to rain for two weeks before he was confined to bed; the day previous he lost his appetite and felt pains in his back and limbs, and was very weak.

He now suffered with severe headache pains from side to side; French tongue; no chills. He was directed by a physician to take an emetic—

-Cathartic, and was bled; without any alleviation of symptoms. Has had no epistaxis, but has spit up much blood mixed with mucus at different times.

1st. He was found when [illegible] on the farm. On entering his condition was as follows. Pulse 100 and soft. Tongue coated with a fur of a brownish color in the center succeeded by a [illegible] and [illegible] on the edges and the tip red and dry with difficulty protruded and [illegible] trembling. He is very restless [illegible] cough. Has bronchitis [illegible] no [illegible]. Expectoration [illegible] mucus [illegible] the same condition throughout the day with no exacerbation and no alleviations. [illegible] to [illegible]

physical exploration indubitable signs of considerable amount of tympanites, the protruding in the iliac fossa being manifestly audible. There are also spots visible on the abdomen which present vacillation in size, some open and well defined, others dark and with pitting or disappearing entirely under pressure. Abdomen

Cos some case, a with signs of pulmonic complication. Percussion dullness exists on the posterior and inferior of right lung, vibrant rales over distinct but both lungs involving the left posteriorly. Face flushed and either cheek presents a dark livid spot. There is no delirium manifested to sight or sound. Complete

loss of appetite, and there is
a tormenting thirst. There is
a thick collection of sordes about
teeth. Much nervous derange=
=ment [illegible] indicated by [illegible]
tendinum and irritability of
nervous system. [illegible]
the tongue [illegible] has been
[illegible] for the last five
days. Potass bit gr v was admin=
=istered in solution every two hours.
Sept 21st Pulse 90 and slight. Skin
hot and dry. Had two stools
during the night. Some of
the spots have disappeared.
Complains of sore throat. Bit
Pot continued, and the following
[illegible] gargle [illegible]
Aq [illegible] in
ice cold water.
Sept 22nd No pain, or appetite
or [illegible] thirst. Bowels moved

once in the course of hours. [illegible]
one afternoon. [illegible]
[illegible]
[illegible]

[illegible] and complains of nothing but weakness. Pulse 100, very weak.
[illegible] and pleured profusely with great difficulty. [illegible]
Sept 4. Countenance anxious.
He was directed to take bit of [illegible]
[illegible]
Sept 6th. Pulse increased.
Sept 24. General aspect better.
[illegible] with increased [illegible] continues. Slept some last night.
[illegible] hands and [illegible] well.
[illegible] in [illegible].

Sept 25th. Much weaker.
[illegible] down in bed. [illegible]

[illegible] ... [illegible]

[illegible] ... [illegible]

[illegible]. Expectoration [illegible]. Tongue

[illegible]

[illegible]

Cough. [illegible]

Tympanites [illegible]. Also [illegible]

exacerbation of fever in the

afternoon. Low muttering

delirium. Excessive subsultus.

Skin very hot and dry. Coun=

tenance anxious. Urine

passes involuntarily. Treat. same.

Apr 25th In the evening tympanites

increased the nervous derangement

[illegible] more frequent and weaker

[illegible] Stopped. Decided to

take [illegible]

[illegible] table-spoon full

every 2 hours. Added each dose

gtts v Oleum Terebinth.

Apr 26th Early this morning

for a few days and could not be counted upon as a reliable. Skin moist, temperature very anxious. Bowels constipated for several days. Unable to provide his tongue or swallowing albumen. He was ordered to take Ki Cont Iodum & Kiroat and also ordered compound of Ch: Cubebin & Wilds Oil Ugra Ol. The injection was ordered for two days then alternated with a copious fecal evacuation; soon after there was a slight increase in the force of the pulse. He passed per urethra. He now takes the medicine and nourishment well. In the morning his pulse was 120 and more full than for the last two days. Respiration 30 He had some up during the afternoon

left testicle. Appears more intelligent; and he talks, rational in his native tongue. Passes urine involuntarily in bed. Discovering a bed sore was discovered on the sacrum which was thought to be the chief cause of his restlessness.

Sept 27th Pulse very frequent and weak. Apparently has great pain in passing his urine, as he grasps his penis convulsively during the act, and his hands are always on that organ, & bin moist. He is somewhat complains of pain in bread. Respiration 30. Decided to take infusion Buchu gij Aqua a tea cup full three times a day, with a tea spoon full of Compt Opio hourly. A poultice was put over his ~~[illegible]~~ bladder. Tree powder was administered during the morning & he allowed to sleep.

Continuation Memorandum.

About 2 O'clock in patient became collapse, and died at 9 P.M.

Autopsy 13 hours after death. Colon distended with flatus. Throughout all intestines containing a small amount of yellowish fecal matter.

In terminal feacus the ileum was thickened and inflamed, near the ileo-coecal valve. Tripe or six of Peyer's patches were larger thickened and inflamed.

About distance above there were two or three ulcers having penetrated through the mucous and muscular coats to the peritoneal.

The Spleen was enlarged and diseased. Liver of normal size but firmer than natural.

Right lung congested and filled with frothy hemorrhagic

Extravasation from the large and small pancreatic tubes; opt. atony congested.

Inflammatory Dysentery.

Treated by Prof. Parker.

Patrick Courtney, a native of Ireland, has been in this country two years. Act 21 years; full plethoric habit. A constitution in blooming order. Temperate man. He states that on Friday morning, Sept 16th without, unusually provoked and without having departed from his ordinary diet, he was taken with headache, feeling sickened, stools tinged with blood, without tenesmus; passing urine about a dozen times a day. On the next day (Saturday) in addition of stomach, some vomiting and little pain in his bowels; was called to stool about 120 times with some tenesmus and passed, without few a good deal of blood. Took his

usual strength and appetite on Friday and Saturday and continued at his work. On Saturday night ate 5 peaches and was soon after seized with burning in his abdomen with frequent cattle-like groaning, vomiting but blood and suffering from thirst. Drinks he had 18 stools of pure blood on Sunday: vomited 3 or 4 times and ate his usual quantity of food. Took 20 grains of Laudanum on Sunday night. Slept soundly during the night. Sunday morning being no better in pain and physician who gave him some pills of Calomel and Opium blistered a mustard plaster over his abdomen, from which he experienced no relief. He had about 40 passages during the day and night with almost every passage vomiting, always vomiting when he swallowed any thing.

general pill composed of Rhubarb
aloes & gamb Pulv Aromatic and ℞ 1 to ℥iv
which he bore well.

Wednesday morning Sept 15th Pulse
82 and full. [illegible] tongue long=
=ue coated yellowish white: great
thirst: vomited twice during the
night: tenderness on pressure over
the ascending colon: no had 5 passages
during the last 12 hours which were
bloody and mixed with feces: no tenes=
=mus: appetite very slight, [illegible]
throw up everything he has taken.
Continued the saline mixture was
suspended to about ℥iv [illegible]
ice and had an injection of boiled
water [illegible] which he retained for a
hour, then passed it [illegible]
feces and little blood. He vomited
about 6 times during the day and the
last hour [illegible] respiration [illegible]
Some of the stools were mixed feces

had no appetite since Sunday night. I detected pointing to an emphysematous position resisting below an emetic of warm water and afterwards some brandy which gave temporary relief.

He entered the Hallowell Infirmary. I received Sept 14th at 2 O'clock in the following condition. Had a passage on an average every half hour, with but little tenesmus, passing nothing but blood and that in considerable quantities; little pain and tenderness on pressure in the course of the ascending colon; vomiting frequently a bilious looking matter. Pulse 66 full and firm; tongue coated greenish yellow; skin moist. He was given the following Hand Sulphuris ℥ii Ext Opii gr iv Aq. ℥iv a tablespoonful every 2 hours. At 8 O'clock he was.

Friday morning, Sept 17th Pulse 66
and natural - thickly tongue is
thickly coated. - rest pleasant, very
weak. - cannot eat any appetite. had
two fecalent passages during the night.
I ordered wine stopped and directed
to take Quinid ℥ss I ammic Acid. ℥ss
℥iv v. inet Opii gtt Lx. I ordered
every two hours. Had great thirst.
Afternoon. Pulse 66 full. I tongue coated
very dry and cracked. Had but two
passages during the morning, I was
soft and without blood. but in one
there was some mucous. Complains
of great weakness. no appetite.
Sunday, Sept 18th. Pulse strong this
morning and rather inclined to
fever. pulse 60 full and strong.
skin pleasantly moist. tongue, moist
and seems inclined to coat. had two
stools during the night, no blood but
some mucous. Directed to continue

blood and mucous. In the after-
noon his pulse was 96 and days
been hot and dry. Appetite increased
during the day being able to take some
mutton broth.

Sept 16th Pulse 82, quick and bounding;
tongue - little thick coated. Had another
injection of cold water last night at 11
o'clock which he retained until 6 o'clock
this morning, when he returned it
with faeces and a decided amount of
blood. No pain or tenderness on pres-
sure over the course of the colon. Feels
pleasant. Urine; no vomiting
within the last 24 hours. Continue
treatment. Afternoon - Pulse 90.
Retained the cold water injection for
4 hours to day and then returned it
with a mixture of blood. Had
another passage of the peculiar and
fed from blood. Complains much
weakness

the Lactic and Tannic Acid

Tuesday Sept 19th. was 6 weeks quite well.

Longed meat and cleaning: had

a slight exacerbation of fever yesterday

afternoon: had the usual cough the

night with some straining, but

the mucus was more healthy;

expects but improving. Thirst

abated. Continue treatment.

Tuesday Sept 21st. Patient has

been improving up to this time

under the same treatment continued

at long intervals and now the house

is very entirely recovered.

An Inaugural Dissertation

on

SCROFULA:

Submitted for Examination

To the

Provost, Regents & Faculty of Physic

of the

University of Maryland,

for the

DEGREE OF DOCTOR OF MEDICINE,

by

Thomas Morgan Elliott,

of Maryland.

February 11th 1853

Mus.

The [illegible] of [illegible]
in different forms, the [illegible] of its
origin and the [illegible] attending
the treatment, have been acknowledged
by discerning Authors from [illegible] ex-
-tinct Periods, of which we have any
Medical records. In truth I know
of no subject in Pathology which have
excited the profound attention of as
many learned, and able, investigators
of the Medical Science, as the one now
under Consideration; embracing as
it does the infirmities which most fre-
-quently afflict the human family Contain-
-ing therefore [illegible] and [illegible] con-
-tinuing [illegible] the
natural period of human ex-
-istence. A disease of such frequent oc-

-currence. So terrible in its effects and so fatal in its results cannot fail to be regarded by all, as not only the most interesting, but also the most important; that is likely to be presented to the Consideration of the Medical Student. And one which certainly demands his best attention and observation.

Dropsy manifests itself in a great variety of forms and modes of disease; from the slightest deviation from health to the most horrible, rapid, and fatal form of general and local disease. And although a great portion of the human race is to a greater or less degree affected by it, yet it seems to be almost exclusively to particular Classes. Persons in whom a tendency to this disease is strongly marked, usually present certain phenomena which render them easy of distinction. These signs are gen-

[illegible] better [illegible] [illegible] than in after years.

Each grade of society is affected with, neither [illegible] [illegible] [illegible] nor the [illegible] of anything present their similarity in disease, [illegible] so constant is this resemblance under all circumstances, and in all countries, inoculating them of this particular diathesis so much, that in the opinions of some they form a variety of the human species which has its special characteristics, [illegible] but of a various physical circumstances [illegible] which is [illegible] emphasized and multiplied by the generative process.

[illegible] most [illegible] of [illegible] variety of persons and gives identity to all diseases appearing in Tubercle.

Tubercle forms by [illegible] [illegible] and

interesting, and most of the most important cases of epipsis known.

Virchow, the name "tubercle" is a very general one; at the present day however, I believe its signification is much more limited; and by tubercle, we now understand those pathological epigenesis which are considered in consequence of a specific disease or morbid tendency. tuberculosis.

Tuberculosis is a disease, putting always the Cause, and not merely the effect of the cause tubercle.

The anatomical and histological constitution of this morbid product can be, it is said, distinguished from all other pathological formations with certainty, if we except the matter deposited in Syphilis, Scirrhous disease, and some other alveolar cancers.

With respect to the origin of this interesting disease, there are

rested at all periods much diversity of opinion; whether this like other secretions is elaborated from the blood, or exists in that fluid ready formed? is a question which I will not attempt to explain or answer.

Pathological anatomy fails I believe to demonstrate any such specific principle in the blood of scrofulous individuals, and the proofs brought to speak against its existence yet it must be borne in mind that with the present means of investigation every modification of the proximate compounds cannot be demonstrated. It also appears from statements made by numerous physiologists and pathologists that the blood of scrofulous subjects is not deficient in the normal amount of its fibrinous element but that it is not duly elaborated and does not possess its normal degree of plasticity. Reasoning the

to be the case, it is not difficult to understand that such a constant deficiency in its growth must necessarily alter the ordinary nutritive process, and instead of renewing the normal tissue, repair it cicatricial product, and in this way go on slowly and insidiously for a long period. It is in this manner that a large portion of the lung often becomes spoiled, its healthy tissue being replaced by these deposits, without any other noticeable symptom an increase of respiration.

Several varieties of tuberculous matter are mentioned in the books, and even the naked eye, it is said, is sufficient to reveal appearances in different cases. The extremes of these differences have been characterized by some authors, as two distinct varieties. In one variety the matter is of a

gray or whitish colour, semi-transparent and homogeneous, this has been styled "Gray infiltration" in the second variety it is yellowish opaque and of a cheesy consistence. It matters not how various these morbids products may appear to the eye of the observer, they are in character doubtless the same, depending at all times for their origin upon a peculiar morbid condition of the system, namely, "tuberculosis".

The difference in colour consistence &c. is dependent upon circumstances of a secondary nature altogether.

When tubercular matter is deposited in the lungs, or indeed in any other tissue of the body, it acts very much in the same manner that other foreign substances do; impairing the textural constitution of the parts, and rendering it secondarily susceptible of inflammation, which is generally of a very unhealthy character. The lungs

masses of this substance which are not unfrequently met with in the lungs, are formed it would appear by the aggregation of many smaller masses which, lying near each other, thus become blended as the deposit continues to increase, causing it into every areolar tissue, to give way under the increasing pressure, and by this distruction of the tissue, the matter is gradually broken down. It is by this process that tubercles are sometimes expelled from the lungs, the cavities left by their expulsion healing without any artificial aid. And in case the congenital tendency to the disease is not very great may thus terminate.

Occasionally it happens that the development and progress of tuberculous deposits takes place in a different way, and cretaceous or chalk-like granules appear in

the tubercular matter, and continues to augment until the other constituents are removed by absorption and in this manner are sometimes converted into a dense smooth mass which are when situated in the lungs usually surrounded by a kind of cicatrix formed of thickened fibrous tissue, and may remain in this condition it is said, for many years without undergoing any further change.

But by far the most natural and ordinary course of these deposits is to soften, and during their process of disintegration they usually cause so much irritation in the surrounding tissue that inflammation of the serous lining is excited.

The most frequent situation of tubercular deposits, is next the lungs the observations of those who have very carefully investigated this

subject, is the first "Mucous Corpuscle" [illegible]. And no matter in what organ it is met with, if mucous tissue enter into the composition of that organ this will be exclusively affected or much more extensively diseased than any of the other component tissues.

The lungs and lymphatic glands are perhaps the organs most frequently affected. But tubercles are also found in the liver, kidneys, external skin, and in fact there is no organic tissue that is not liable to become the theater of its ravages. Tubercular deposits are very rarely, if ever found in the muscular or circulatory systems; in the skin and it is rarely met with. - In the brain however, it is of very frequent occurrence.

That most fatal disease known by the name of Hydrocephalus is thought by many, to be caused by tubercular de-

deposits within the brain or its membranes, it is likely occurs principally if not exclusively, in connection with the scrofulous diathesis.

Scrofula may reveal itself at any period of life, but usually manifests a liability for particular organs at various periods in childhood and youth. The lymphatic glands about the neck and throat, are seemingly prone to affection of this nature, but in after years the respiratory organs are beyond all comparison the most frequently affected, and the upper part of these organs are first, and most thickly set with the morbid deposits.

Deposits of this character are often met with in persons of a very tender age, even as early as fœtal life, and is in many cases the death, or cause in bringing about premature

abortions which destroy so many beings before they are permitted to see the light. After birth scrofulous affections, retard, and not unfrequently arrest all the physical and moral developments, — they complicate every disease of infancy, childhood and youth, rendering it serious and full of danger.

I have furthermore said that persons in whom there is a marked tendency to these affections, usually present certain physical and moral phenomena, which indicate the existence of such a diathesis, and this seems appears to be the case where there has not been any local manifestation of the disease whatever.

Now to be able to appreciate these signs, and distinguish them in those the peculiar diathesis exists is not only interesting, but both cogent

and important, for a knowledge of such [illegible] the judicious Practitioner may a little [illegible] occurring in such persons, and which, if treated without due regard to the existing Constitutional peculiarity, will in not a few Cases be followed by most fatal Consequences.

The external signs by which this Disease, or a predisposition to it, may be recognized are exceedingly numerous, so much so in truth, that I will only attempt to point out the most Common and prominent of them. Pursuing no system it is most likely to reveal itself, usually present Congestion, [illegible] the [illegible] veins, large and badly shaped heart, Contracted chest, prominent abdomen, soft and flaccid muscles, a languid and feeble circulation

Their skin is dry, and exceedingly thin, but this is by no means invariably the case, for it is sometimes in a state of inflammation. The partial sweatings which occasionally occur are said to have a marked acid smell. They are very susceptible to the influence of cold and damp, and in almost every case present some chronic affection of the mucous or dermoid tissues.

Dual regula ofti. manifests itself in persons of quite a different temperament, a variety that is known as the sanguine, which is indicated by red or light hair, grey or blue eyes, the pupils of which are said to be large and sluggish, the complexion is fair, clearly white, or brown tint, hair long and silky. The skin in this variety is also thin, very fair and soft, and is often so transparent as to enable one to see very distinctly the venous

of the veins beneath, and is accompanied by a rosiate rash of the cheeks and tibia, which is generally well defined, but varies extensively both to a pimple or livid hue, [illegible] stories are generally flaccid, pendulous and intestinal. [illegible] are usually of a good stature, but on the other hand they are sometimes very tall, and seldom symmetrical in their bodily conformation. Their limbs are apt to be either too long or too short or crooked, the spongy portions of the extremities of the long bones are too much developed in proportion to the solid substance, rendering the joints very conspicuous and unseemly. The teeth have a deep black tint, and nearly and early decay, the feet and hands are often disproportionately large, [illegible] a most unsightly appearance.

The upper lip, and many of the

[illegible] often [illegible] a [illegible] of [illegible],
particularly if the [illegible] is [illegible]
just after rising, — the hair is badly
[illegible] — the edges of the eyelids are
prone to become inflammed, — digestion
is irregularly and badly performed —
appetite variable, being sometimes almost
totally deprived, and at other times
very urgent. In Females a leucorrheal
discharge is apt to occur from
time to time, which is, in many Ca-
-ses, very troublesome and obstinate in
character. It is among this class
of persons also, that we most fre-
-quently find cases of dislocation
of the femur after the [illegible]
acute diseases of the superior maxillary
bones, Spina bifida &c.

[illegible] the lymphatic glands in the inguinal
region of the [illegible] are apt to become en-
-larged, presenting to the touch a

firm, hard, tumours which may remain in this condition for a long time, without either receding, or going on to a more active form of disease, but such tumours are liable to pass, at any period of their existence into slow inflammation, which terminates in suppuration, or as it is thought by some in scirrhus, but this is certainly very rarely, if ever the case.

Obstinate ophthalmia and tarsal pannus to slight Calarrhal affection are also very common symptoms of this diathesis in young persons.

The abscess caused by the suppuration, and sloughing of scrofulous tumours, are generally indolent in such, discharging a thin ichorous fluid, or an unhealthy kind of pus, having floating in it, lumpy particles which are very characteristic of this form of disease: they are very strong

and the cicatrices left by them, are easily distinguishable from those resulting from other causes.

Now for the most common source of origin of scrofulous affections is <u>hereditary</u> [illegible] If they positively never find it origin in external causes, I will not venture to say; but in [illegible] of cases it can clearly be traced to the former cause. Indeed, the transmission of a scrofula from parents to their offspring is a fact too general not to have been recognized at all periods; and may be recognized by two principal characters; (1) by the frequent occurrence of the disease in a family; (2.) by the great mortality which it [illegible] causes. Facts which are too familiar to all. It is said that "scrofula & the other hereditary complaints may which [illegible] one or two generations

just as generally believed and known to do." And this may be true, but I must confess that I have not as yet, quite reconciled my mind to this view of the subject.

Many and various have been the causes considered as capable of themselves to give origin to this disease but as I said before, I think it somewhat doubtful, whether in any case external and accessional causes are adequate to generate it. It is true that scrofulous affections do often occur for the first time after some severe febrile, or exanthematous disease indeed the fact has been long familiar to all that small-pox, measles, whooping-cough and scarlatina, tend to kindle them many chronic complaints; such as ophthalmia, catarrhal affections of the larynx and bronchia, ulcerated tubercles, abscesses in various

regions of the body. All of which are indicative of the existence of scrofula. But this does not by any means prove that they are capable of giving rise to such affections, and should, I think, be considered as acting the part of an exciting cause only, in bringing out this evolution in the scrofulous person.

The exciting causes of these affections are exceedingly numerous, far too much so, to be separately considered, and to use the language of an author, "They all be reckoned together as causes of debility, acting formally, or habitually for a length of time, although not so powerfully as to produce sudden or violent effects."

Among the most frequent of these causes, may be mentioned, the influence of a bad quality, expiration & food as well, especially of the atmosphere, the

wind of natural and healthy exercise and mental disquietude.

Diseases of this nature are much more frequently met with in the towns and walks of life, than in the higher grades of society, and the reason why this should be the case is obvious enough. They are unavoidable much more exposed to the various exciting causes.

But it does often occur among the rich, seemingly without any appreciable external causes, and even under hygienic conditions best adapted to fortify the health. It matters not in what organ it manifests itself, it is in every case the same. But when it does reveal itself in any one of the tissues, with a certain degree of intensity its sympathetic development in some of the neighboring tissues may be confidently expected. And the sympathetic irritation will be with equal propriety extended

to different and distant members of a family, in which a predisposition to the disease, is known to exist.

The forms of this disease, most frequently met with, are tuberculous phthisis pulmonalis, white swelling of the hip and knee joints, caries of the bones, rachitis, and Ophthalmia.

Prognosis. This depends much on the locality of the disease, and the degree of intensity with which it manifests itself, the age and circumstances of the individual. It should therefore be guarded. The predisposition to these affections may be so great in certain individuals, that no combination of circumstances, no matter how skilfully devised, will prevent its usual manifestation [illegible] [illegible]; when the [illegible] is not greatly affected [illegible] cause could be [illegible]

never perhaps reveal itself in an active or dangerous form.

[illegible] developed itself in some one or other of its active forms the chance of [illegible] it is [illegible]

Nevertheless it would seem that [illegible] Constitutional tendency to the disease cannot be questioned, Moderate Cases, not infrequently are [illegible] or existing [illegible] about the age of puberty, or after the full completion of the Corporeal development, and the age of maturity has arrived. But it is much more frequently the case [illegible] Strumous [illegible] at this [illegible] [illegible] to [illegible] state, when [illegible] case [illegible] [illegible] of being able to [illegible] [illegible] are moderate [illegible]

[illegible] to remove all its symptoms.

The age of the person, stability and duration of the disease, and which should now be considered in giving an opinion, as to the probable result of a case.

Sir Granger the person is the more easily in general, will it be to effectually remove or counteract its further progress, which so long as the disease is confined to the glands about the neck and throat, manifesting itself in extensive swelling only, and appearing in no way to form tubercular deposits in any of the deeper organs, a well timed and judicious course of the treatment mentioned I think, in the majority of cases, should in time, its further development and most frequently successfully remove every symptom. But when it does

attack any of the internal, and healthy vital organs, which is too often the case, so favourable a termi-nation seldom, if ever, takes place; but the disease generally goes on slowly, but surely, to spoil, and des-troy the part; particularly is this the case, when the lungs or mes-enteric glands happen to be the seat of its ravages; — cough, phthi-symptoms (Hectic fever) and emaciation sooner or later supervene and all idea of recovery must be abandon-ed as entirely hopeless.

Treatment.

I know of no disease arising from external influences which is at all comparable with those of a congenital origin, in respect to the difficulty of their removal from the system. [illegible] congeni-tally existing at all periods much dis

[illegible] of [illegible]

in respect to the best mode of management to be observed in the treatment of Scrofula, blend the immense number of [illegible] [illegible] as Constitutional [illegible] [illegible] remedies [illegible] strong, very [illegible] the different [illegible] [illegible].

The Materia Medica scarcely contains a remedy of any importance which has not at one time or other been [illegible] [illegible] [illegible] as [illegible] efficacious in this affection, and as positively denounced by others.

But from what is known of the nature of this disease Common sense ought to teach, that it is not to be cured by one remedy; it cannot, or rather should not, be expected that a Constitution, whose organization is [illegible] [illegible] low in vitality, is [illegible] [illegible] organized as it were, and perfected by

any one remedy, no matter what its virtues may be. If a medicine improve the appetite, and increase the general vigor of the system, it should be considered on the other hand, should it cause nervousness, emaciation, or other symptoms of debility, no preconceived notions on the part of the Practitioner, of its specific virtues can warrant its further administration. The most important indications to be borne in mind in the treatment of this disease, are to sustain and strengthen the Systems and prevent the local manifestation of disease. The means by which this may be accomplished are both Hygienic and Medicinal.

The principal Hygienic means for the relief of gastric or mucous inflammation are the Latter; and consists in a full allowance of Nutritious and digestible food, free, but gentle, exercise in the

open air, warm clothing, bathing, and a careful avoidance of the various exciting causes. For the latter to restore, and maintain the various functions and secretions, improve the appetite, promote digestion, enrich the blood, and invigorate the circulation. The remedies best adapted to fulfil these various indications are Opiniones, Tinctures, Lavages, and Tisanes. Time and Space will not permit me to enter into a detailed description of the various and numerous Conditions, to which each of these are applicable. The tonics, and alteratives, which experience and observation has shown to be most useful in these cases, are Cod-liver oil, Iron and its preparations, Iodine, and the rest of the similax. Officinalis.

Perhaps there is no country in the Materia Medica, so rich of curat-

-dense as Iodine. Since its discovery in 1812 it has been more extensively employed than any other known remedy and has attained great favour with the profession at large. It is never given in substance, some one or other of its preparations are usually preferred. It is used externally in the form of Tincture, ointment, or watery solution combined with the Iodide of Potassium which is perhaps better than either the Tincture or ointment, it may also be used in baths, or by fumigations. Its external application is very frequently attended with irritation of the skin, but this is never attended with any evil results. I believe, lasting only a short time.

To be of much service in the treatment of scrofula it must be persevered in for a long time, as is the case with the other remedies mentioned above.

Without attempting to explain the

Modus Operandi by which these remedies exert their salutary influence, I deem it sufficient to say that the views entertained by different Authors are discordant, multifarious, and too often wild and hypothetical.

An

Inaugural Dissertation.

On Opium

Submitted to the examination

of the

Provost, Regents, and Faculty of Physic

of the

University of Maryland

for the degree of Doctor of Medicine,

by

L. P. Machenheimer

of Maryland.

Opium.

This most important remedy is obtained from the Capsules of the Papaver Somniferum, a plant indigenous to Asia and Egypt, growing wild apparently in some parts of England, and cultivated in gardens with us in the United States. The mode of extracting Opium is to a certain extent similar in all countries, and consists in making incisions into the half-ripe poppy capsules and collecting the exuded juice. According to Fepier a few days after the fall of the flowers, persons proceed to the fields and make horizontal incisions in the capsules, taking care not to penetrate its cavity, until juice exudes, and appears upon the edges of the incisions. The field is left in this state for twenty four hours, after which the juice is scraped off by means of blunt knives. Thus collected the Opium is in the state of an adhesive and

granular jelly. It is placed in small earthen vessels, where it is beaten and at the same time moistened with saliva. When of a proper consistence it is wrapped in leaves and sent into the market. As we find it in the shops, it is of a dark reddish brown colour externally, and internally of a dusky red. It is opaque, compact, of a peculiar disagreeable narcotic odour, and bitter acrid taste, with some degree of warmth. It is inflammable, and yields its virtues to water, alcohol, and diluted acids but not to ether. To all these menstrua it imparts a deep brown colour.

In commerce, several varieties of Opium are known as the Smyrna, Constantinople, Egyptian, Persian, Indian, Bengal, Malwa &c. But the principal kind however is brought from Smyrna and forms the best commercial Opium.

Dorsue and Sallze have denoted mud

attention to the composition of Opium. In the year 1817. Sertürner announced the existence of a saline compound in this substance, consisting of a peculiar alkaline principle united with a peculiar acid, and clearly demonstrated the precise nature of a substance, which though before discovered, had been hitherto but vaguely known. To this alkali, in which he correctly conceived the narcotic powers of the opium to reside, he gave the name of Morphium, which has been changed to morphia by English writers. An acid he also discovered to which he applied the term Meconic, but this acid in a separate form does not appear to possess any active qualities. According to the views of its constitution at present admitted Opium contains 1st morphia, 2nd narcotin 3rd Codia 4th Paramorphia 5th narceïn 6th meconin, 7th meconic and sulphuric acids, 8th an acid not yet fully investigated, 9th Extractive Matter, Gum, Bassorine, et

fixed oil, besides small proportions of citric acid, Sulphate of Lime, and Potassa, Alumina, and Iron. Litmus paper is reddened by a watery infusion of Opium, owing to free acid, (meconic acid.) citrate and Diacitate of Lead occasion a copious gray precipitate, (Meconate and Sulphate of Lead.) Sesquichloride of Iron gives it a deep red color, (Meconate of Iron.) ammonia renders the infusion turbid, (Precipitates morphia and narcotine.) Tincture of nut galls causes a precipitate, (Tannates of morphia and codeia,) citric acid communicates to the infusion a red colour, Iodic acid and starch cause, sometimes after a few hours a blue precipitate, (Iodide of Starch.) chloride of Gold causes a deep fawn-coloured precipitate.

The effects of Opium are evinced in a greater or less degree upon whatever part of the System it

application is made. When introduced into the cavity of the peritoneum it speedily produces convulsions and death. Injected into the cavity of the heart it instantly, or altogether destroys the power of that organ. When introduced into the cellular tissue it acts with great energy, and when applied to the skin or rectum it acts in a prompt and decisive way. The effects of Opium vary greatly according to the quantity given. In small doses it sensibly excites the nervous and vascular systems. The mind is usually exhilarated; the ideas flow more quickly; there is a pleasurable or comfortable condition of the whole system, and a capability of greater exertion than usual. These symptoms are followed by a diminution of muscular power, and of the sensibility, the impression of external objects; a desire of repose is experienced, with a tendency to sleep. When this

effects are taking place, the mouth and throat become dry, and hunger is diminished, though the thirst is increased; and slight constipation usually follows. Such are the effects of an ordinary dose of Opium on a subject unaccustomed to its use. By repetition however, its influence becomes considerably diminished, and those who resort to it for pleasurable excitement, must augment the dose to keep up an equal effect.

Given in a full dose (as from two to four grains) the stat of excitement is followed by that of depression. The pulse which before was more full and frequent, is reduced below the natural standard. The skin becomes hot; the mouth and throat dry; the appetite diminished; the thirst increased, and frequently nausea and vomiting are induced. The period of excitement

passes away and a state of torpor succeeds; The force of opinion impinging on the organs of the senses is diminished; This is followed by an irresistible desire to sleep: which is frequently attended by dreams of a heavenly or frightful nature. If the quantity of Opium is still increased the voluntary motions are suspended; The sensorium commune ceases to exercise its control over the animal functions of the system, and profound and heavy sleep weighs down every conscious faculty, and the whole expression of the countenance is that of deep and perfect repose. As the poisoning advances, the features become ghastly, the pulse feeble and imperceptible, the muscles exceedingly relaxed, and unless assistance is speedily procured death ensues. If the person recovers, the stupor is succeeded by prolonged sleep, which commonly ends in-

twenty four or thirty six hours, and is followed by nausea, vomiting, giddiness and loathing of food.

Such are the immediate effects of a dose of Opium in a large quantity. There are other consequences however which follow its long continued use, demonstrating with equal force the deleterious influence of this article on the living economy, when improperly taken.

The habitual Opium taker, unless he is under the immediate influence of this potent narcotic, evinces all the symptoms of physical and intellectual imbecility, a total attenuation of body, a wither'd yellow countenance, a lame gait, a bending of the spine, frequently to such a degree as to assume the circular form, and glossy deep-sunken

eyes, betray him at the first glance; he is timid, low-spirited and fearful; he experiences a tormenting anxiety of feeling; is totally disinclined, as well as unfit for, bodily or mental labour; he is feverish, and feels pains in different parts of his body; his extremities are cold; indigestion torments him; he cannot sleep, and feels a tremor throughout his whole body. When the system is entirely free from the influence of the accustomed stimulant, torments of the most distressing kind are experienced, although the evil effects of this narcotic taken habitually are generally known, yet in all parts of the world, Opium is employed by many with a view to its exhilarating and anodyne influence; this is particularly the case among the Malays and Hindoos, who find in this narcotic, the most pleasing substitute

for those alcoholic drinks, which are interdicted by the precepts of their Religion, In India, Persia and Turkey it is consumed in immense quantities; and many nations of the East smoke Opium as those of the West do Tobacco. The use of this drug as a medicine can be traced back to Diagoras who was nearly contemporary with Hippocrates. At present it is more frequently employed than perhaps any article of the materia medica. From what has been said, the following effects of the drug may be enunciated.

1st Its primary effect in a small dose is, an increase of the force and frequency of the pulse. When given in a large dose its primary excitant operation is extremely transient, and the pulse almost immediately becomes fuller and slower. 2nd It diminishes

muscular irritability, and lessens the peristaltic motions of the intestinal canal.

3rd It lessens some of the secretions as of the gastric and pancreatic juices, and the mucus of the bowels, occasioning thereby a dryness of the mouth, fauces and intestinal canal. It lessens also the mucous secretions of the bronchia and nose. The secretion of the bile is not affected but the excretion is entirely checked. The serous secretions, on the contrary, especially that of the skin are considerable augmented by the use of this article. In many persons it produces a singular pruritus, and in some a papular eruption, on the surface of the body. It increases also the aqueous exhalation from the lungs.

4th It at first excites but afterwards lessens the sensorial powers; induces

torpor, insensibility and sleep, hence its applicability in all cases where there is pain and nervous irritability, unaccompanied with an inflammatory condition of the system.

Opium is usually administered in substance or in tincture. In the former state it is given in the form of pill, which should be made of powdered Opium so as to be more readily dissolved in the stomach and therefore operate more speedily and effectually, than when made immediately from the plastic mass. There is no medicine of which the dose is so variable according to the habit of the patient, the nature of his complaint, or the purpose to be affected. While in catarrh and diarrhoea, we often prescribe not more than one-fourth or one-third

of a grain, in tetanus and some other nervous affections, it has been administered, without abating the violence of the symptoms, in the enormous quantity of two drachms in twenty-four hours, and in cases of cancer the dose is sometimes greatly increased. The medicine dose in ordinary cases of disease, to produce the anodyne and soporific effect of the medicine is one or two grains.

When Opium has been taken in overdose, the only effectual mode of relief is immediately to evacuate the stomach, either by means of the Stomach pump, or when this is not attainable, by the active emetic, such as tartarized antimony, sulphate of zinc or sulphate of copper, conjoined with Ipecacuanha, emetic are better

than the stomach-pump when opium has been swallowed in substance, the operation of the emetics should be promoted by a free use of warm drinks, by irritating the fauces by a feather, by keeping the patient in motion, and if the insensibility to the action of the remedy is very great, by dashing cold and warm water alternately upon the head and shoulders, this counteracting for a time the narcotic influence of the opium upon the brain, and enabling that organ to receive and transmit the necessary impressions. For this purpose some advise an electric current to be passed through the brain. After the evacuation of the poison, the principal indication is to prevent the debility which generally follows, and which in cases

where the quantity of poison is large, or has remained long in the stomach, is sometimes even fatal. To accomplish this, the carbonate of ammonia or the aromatic spirit of Ammonia may be employed internally, and sinapisms and stimulant frictions applied to the stomach. The stomach tube may be employed at any period. Should all other measures fail, it would be best to try artificial respiration, by which the functions of the heart and lungs may be sustained until the brain by struggling through the conflict, will be enabled to resume its natural action. If artificial respiration can be employed before the cessation of the heart's contraction, the circulation may continue, and life for a time be sustained

without aid from the brain, and receiving supply of arterial blood, is thus better able to sustain and resist the depressing action of the Opium. Several cases are on record, in which patients, apparently in the very last stage were saved by a resort to artificial respiration.

We give Opium to fulfil various indications, thus with certain regulations we give it to mitigate pain, to allay spasms, to promote sleep, to relieve restlessness, produce perspiration, to check profuse mucous discharges from the bronchial tubes and gastro-intestinal canal. It is used much in fevers, but when employed it should be given in small doses, and its effects carefully watched.

The symptoms, for which it has been resorted to are, nausea, great restlessness, delirium, tremor and diarrhoea. Its efficacy is great in allaying delirium in patients who have been addicted to the use of spirituous liquors. When stupor or coma supervenes in fever, the use of Opium generally proves injurious, when there is much cerebral disturbance in fever the combination of Opium and emetic tartar has been strongly recommended. As an antiphlogistic in inflammatory diseases, it is best given in conjunction with calomel, and is best adapted for the disease when it affects membranous parts, and is much less beneficial in inflammation of parenchymatous structure of organs. In nephritis and Enteritis preceded by bleeding, in

Peritonitis and Puerperal fever. In Cystitis preceded by blood-letting and the warm bath. In inflammation of the walls of the pelvis of the kidney, and also of the ureters especially when produced by the presence of a calculus. In inflammation of the gall ducts from the same cause. In inflammation of the mucous membranes attended with increased secretion as in Pulmonary catarrh, Diarrhoea, Cholera in Peripneumonia after blood-letting and the advanced stages of Pneumonic inflammation when the ~~difficu~~ difficulty of breathing has abated, and in Rheumatism both acute and Chronic. Opium is the best remedy used.

The use of Opium has been recommended in diseases of the cerebro-Spinal system

as in Insanity of a melancholic form, and also to relieve intoxication. In Delirium Tremens the efficacy of Opium is universally admitted, also in convulsive diseases as in Chorea, Epilepsy and Tetanus.

In Diseases of the chest as Catarrh, Spasmodic Asthma, it is principally used. Hemorhages as the Uterine and Bronchial, it is used advantageously, In mortification when there is great pain, and in venereal diseases to prevent the action of the mercury on the bowels during salivation, and also as an anti venereal remedy, In some one of its liquid preparations Opium is often used externally as an addition to collyria in Ophthalmia to injections in Gonorrhoea, and to lotions in various complaints of the skin, and external pains as those of gout and rheumatism. It is

also used as a local anodyne in the state of powder, made into a plaster or cataplasm.

In poisoning by the strong acids and alkalies, Opium has been found useful by diminishing the sensibility of the alimentary canal. The meconic acid is said to be an antidote in cases of poisoning by corrosive sublimate, Opium in full doses may perhaps be administered with some advantage, when other antidotes cannot be procured, and in poisoning by the preparations of arsenic, of lead, and of copper.

We find the preparations of the poppy employed in medicine, arranged under three heads. 1st those of the poppy heads, 2nd of Opium; 3rd of morphia.

Preparations of poppy heads.

1st Decoctum Papaveris. Decoction of Poppy; 2nd Syrupus Papaveris. Syrup of Poppies, 3rd Extractum Papaveris, Extract of Poppy.

1st Decoctum Papaveris; Decoction of Poppy. This preparation is used as a common fomentation, which is applied to bruised, inflamed, excoriated, tender and swollen parts; to the eye in Ophthalmia, to the abdomen in enteritis and peritonitis, and to tender uterus, in cancer and other painful affections of the uterus, and thrown into the vagina as a soothing application.

2nd Syrupus Papaveris, Syrup of Poppies, and 3rd Extractum Papaveris, both appear to produce effects similar to those of Opium. They mitigate pain, allay spasm, and troublesome cough and promote sleep

The dose of the Syrup is from half a fluidrachm to a fluidrachm for an Infant, from half a fluid ounce to a fluidounce for an adult, and of the Extract from five to ten grains.

Preparations of Opium.—The ware so numerous that we can only mention the most important.

1st Extractum Opii Purificatum, Purified Extract of Opium.
Take of Opium one pound; Water five pints (Imperial measure) cut the Opium into small fragments, macerate it for twenty-four hours in a pint of water, break down the fragments with the hand; express the liquid; break down the residuum again in another pint of water, let it macerate for twenty-four hours, and express the liquid in a pint

the maceration and expression in the same way until the water is all used. Filter the successive infusions as they are made, passing them through the same filter; unite and evaporate them in the vapour-bath to the due consistence. It is usually believed to operate with less disturbance to the general system than the ordinary preparations of Opium. It is employed as an anodyne, sedative, and sopoific, in cases where crude Opium or its tincture disagrees. The dose of it is from one fourth of a grain to three or five grains.

2nd Tinctura Olii, Tincture of Opium, Laudanum. Take of Opium in powder, two ounces and a half, Diluted Alcohol, two pints, Macerate for fourteen days, express, and filter through paper. This tincture is used for all the purposes to which Opium

is applied. The dose equivalent to a grain of Opium, is about twenty five drops. Laudanum when long kept, with occasional exposure to the air, becomes thick, in consequence of the evaporation of a portion of the alcohol, and the deposition of Opium; If given in this state it often acts with great energy; and cases of death have resulted in infants from its use in doses, which would have been entirely safe if the tincture had been clear.

3rd Tinctura Opii Acetata, Acetated Tincture of Opium: Take of Opium two ounces; Vinegar twelve fluid ounces; Alcohol half a pint, Rub the Opium with the vinegar, then add the alcohol, and having macerated for fourteen days, express, and filter through paper. The acetated

tinctura of Opium may be advantageously used in cases in which Laudanum or Opium itself produces unpleasant effects, Dose from ten to twenty drops.

4th Tinctura Opii Camphorata, Camphorated Tincture of Opium, Paregoric Elixir Take of Opium in powder; Benzoic Acid each a drachm; Oil of Anise; a fluid drachm; Clarified Honey two ounces; Camphor, two scruples; Dilluted Alcohol two pints: Macerate for fourteen days, and filter through paper. This is a very valuable preparation, and is much used by the public and Profession. Its principal use is to allay troublesome cough, unconnected with active inflammatory symptoms. It diminishes the sensibility of the bronchial membrane.

to the influence of cold air, checks profuse secretion and allays spasmodic cough, One fluidounce containes about two grains of Opium, The dose is for an Infant from five to twenty drops, for an adult from one to two fluidrachms.

5th Vinum Opii. Wine of Opium, Sydenhams Laudanum. Take of Opium in Powder, two ounces: Cinnamon bruised, Cloves bruised, each, a drachm, Sherry wine one pint: macerate for fourteen days, with occasional agitation; then express, and filter, through paper. Its effects are similar to those of the tincture of Opium, but its taste and smell are more agreeable. It is used as an external application to the eye in Ophthalmia with some success, For internal use the dose is the same as the tinctura.

Acetum Opii, Vinegar of Opium,

Cut the Opium into small fragments triturate it into a pulp, with a little of the Vinegar, add the rest of the Vinegar, macerate in a closed vessel for seven days, and agitate occasionally. Then strain and express strongly and filter the liquor. Vinegar of Opium is employed as an anodyne, sedative, and soporific, about twenty drops are equivalent to thirty of the common tincture of Opium, Dose from five to thirty drops. It may be regarded as the officinal substitute for the celebrated quack medicine called the Black Drop.

An
Inaugural Dissertation
on
Typhoid Fever
Submitted to the Examination
of the
Provost, Regents
and
Faculty of Physic
of the
University of Maryland
for the degree
of
Doctor of Medicine
by
Moses T. Thomas
of
Harford County
Md.
1853

To

Saml. Chew M.D.

Prof. of the theory and Practice of Medicine

formerly

Prof. of Materia Medica and Therapeutics

For his judgement and skill
in the practice of Medicine.
For his zeal in search of truth;
and for the interest with
which he imparts it to the
learner,

this thesis is most respectfully dedicated
by his friend and

Obedient Servant

the Author

Gentlemen,

In connection with the unchanging routine of preparatory study, it becomes the duty and obligation of every student of the healing art, to send to the Faculty of physic some communication in thesis form, whether it be required as evidence of qualification in medicine, or to test the student's ability to communicate his thoughts in a clear manner, thereby showing the amount of instruction preparatory to his study of medicine, is a matter which does not now concern me. But that as it may, I am led to presume that what I have here to say, will have but little weight in determining my graduation, as the Faculty is already

aware of what claims, I have upon the honors of the time honoured institution, of which I claim to be a son. By public examination during the winter (to which I have faithful to attended) as well as by my final success in the Faculty room. I shall expect the Faculty to form their conclusion of my merits. For is it to be supposed that upon entering my life of study, as the expirance of my ancessors, I have with my own number of the rapidly advancing science of Medicine, all hitherto necessitate a study. Indeed the man, who embarks in Medicine, literally becomes a student for life; and as soon as he ceases to study, becomes an humble dependent on the energy of others; a fact too humiliating to be brooked by any honorable and exalted mind. And he who will content himself to remain quiet and ignorant of no further into the mysteries of Medicine, must of necessity, retrograde so that in a few years he will find himself not only

substituted in the drawing room, but to be the time behind the profession. The subject which I have selected, as my own is one which the Faculty has examined and submitted to them, and they will find into such matter as they have seen, under circumstances like these. Indeed it cannot be expected that I will here present any thing new as the same subject has been so fully investigated by others, whose means as well as powers of observation, have been much superior to mine. I will therefore confine myself to such views, as have been laid down by Authors, Lecturers, and my own observation

Typhoid Fever

Typhoid fever, as a distinct disease, escaped the notice of writers until as late as the nineteenth century. Fevers of a typhoid character, a low form, were merely thought to exist, as a complication of other maladies, or as identical with that of typhus. There is, says an English Author, no line of marked distinction that can be relied on. But

Since the publication of [illegible] of [illegible] and important views [illegible] distinctive marks of this malady and who is not willing to believe with Dr. [illegible] Author, that it is not a specific and seperate disease, there is no disease in the calendar of Medicine which has been more minutely and deeply studied through all its varied forms and complications than this. Men of the [illegible] and unremitting ardour, have studied it diligently and [illegible] and [illegible] the merits of writers [illegible] to [illegible] Since the symptoms, diagnosis, anatomical lesions and important phenomena of Typhoid fever have been so [illegible] proves it to be a distinct seperate and specific disease, but affords material and knowledge to upset the [illegible] ers. By many of the [illegible] fever were held to be essentially the same, and included all under the head of Typhus. They saw a

difference in the disease in different cases, but attributed it to intensity of the same disease, or complication &c. Any one, with sufficiently acute observation, can see by [illegible] of these diseases, when pure and uncomplicated, cannot question their difference in any essential particular; but that they [illegible] lines of difficult diagnosis, or very much alike, [illegible].

[illegible] of which [illegible] Tabid [illegible] applied, [illegible] the exterior character, rather than of any anatomical [illegible]. This [illegible] to, from the fact 1st that any other affection may [illegible] condition. And 2nd that they may run their whole [illegible] attended, or [illegible]. And I believe [illegible] will as [illegible] that could be applied, because it is well [illegible]

[illegible]

most of the other appellatives now in use. A host of other names have been [illegible] ted or coined by different writers; such as typhoid entiritis denoting the lesions in the bowels, [illegible] state of the mucous follicles. Enteric mesenteric fever, and Enthric fever all refer to the same lesions of the small intestines mesenteric glands &c. It is sometimes however as nervous or common continued fever. But whatever names may be given to this disease the affection is always the same.

Typhoid fever usually commences slowly and gradually, and in most cases, is preceded by some premonitory symptoms, which are very uncertain marked but gradually becoming more fully developed untill they arrive at their zenith at intervals which is, in the great majority of cases that recover, about the end of the second week or beginning of the third week, commencing

from the first recorded chill. Or it may [illegible] premonitory stage may last from one days to one or two weeks. When commences abrupt, the symptoms may be of such character as to [illegible] with signs of no difficult diagnosis. The chill stated before the disease is generally slow in the start. The patient [illegible] out [illegible] feeling a disposition to do nothing, but lounge about. This indisposition, general uneasiness or restlessness may be felt several days before the patient complains to any one of his condition. When there supervenes on this initial stage, [illegible] forming in the [illegible] sensation in the joints; a feeling of languor muscular weakness, chilliness or decided rigors. Afterwards acceleration of pulse; flushes of heat over the surface, heat of skin; furred tongue

unpaired or loss of appetite &c. These symptoms may last only for a few days and the [illegible] [illegible] no sufficient cause to call the person into action. The patient says he is unwell or [illegible] or a week, and is unable to tell what is the matter [illegible] stage; [illegible] decided symptoms, that would point out the character of the disease

A [illegible] three weeks, [illegible] three periods, or the disease may be divided into three stages. Symptoms occurring in the first week, those of the second and those of the third [illegible] of the precursory stage increase and others are superadded. The febrile movement gradually increases in severity; so that the pulse which

was at first very little accelerate [illegible]
quent and lab [illegible]
and dyer, though sometimes [illegible]
ture; face flushed warmer and sometimes
even burning. After the evening exacer [illegible]
perspiration breaks out on the [illegible]
[illegible]
abhorrence of food. Tongue becomes more thick
ly and evenly coated, and in some [illegible]
very dry, parched & brownish; mouth dry and
clammy. Head ache which was a [illegible]
[illegible]
[illegible]
varies in [illegible]
day. The [illegible]
tenance denotes indifference and general
apathy. Delirium is ranked among one of the
most [illegible] symptoms. It may occur early
in the first week, but as a general thing it
does not take place till about the second
week. Though very early, when there is no
actual delirium, the mind is wandering

More rarely, there is no delirium until days before death. It comes on more [illegible] in the evening. Some diseases again the st[illegible] fever is so great that it is with the difficulty that the patient can be roused. In some instances the delirium is active, so much so that the patient will often jump out of bed, and persist in doing [illegible] that he ought not to do. But in by far the majority of cases, the delirium is of a mild or a low muttering character; the patient talking incoherently or excessively, making aimless and unmeaning motions, sometimes imagining himself from home and wishing to return. In most cases there is buzzing or ringing in the ears, and deafness very com[illegible] [illegible] cases; from hardness of hearing to com[illegible] [illegible] complained of, though the opposite [illegible] be present in some instances. A great majority of the cases of Typhoid fever is marked

by debility and prostration of [illegible]. So much so in a given number, that it is one of the great feat[illegible] [illegible] quent, and is particularly observed in the tendons of the hand and wrist. Though the muscles of the face, and other parts are seen [illegible] or very bad cases [illegible] Epilept[illegible] and [illegible] frequent and common phenomenon of this malady, is diarrhoea. This symptom varies in different cases. [illegible] in number and small in quantity, or they may be very frequent and profuse. It may vary also in duration from a few days to the continuance of the disease. Diarrhoea may be the first symptom. But [illegible] in at any period or stage; most frequently it makes its appearance between the 3rd and 14th days. It is a very diagnostic [illegible]

Tympanitis is [illegible] of [illegible] ptom. It may also occur in different indi [illegible] tion, [illegible] by distended; very tense and Tympanitic. The flatulent collection is mostly found in the colon, though sometimes a small quantity is collected in the lower part of the ileum. Here, in this condition, we may call to our aids the physical signs. The abdomen yields on percussion, in such cases, a semiclear or Tympanitic sound. When pressure is made in the right illiac region, there is often heard a peculiar gurgling sound, which comes the head of the colon (Cæcum) and is very important as a means of diagnosis. It could scarcely be expected, that such changes could occur [illegible] of [illegible] as the [illegible], [illegible] of pain or tenderness being felt by the sufferer. Nor do they take place without it; for there are always more or less abdominal

pain and tenderness. These signs are des-
ied as occurring most frequently
epigastric region and particularly the
Sometimes tenderness is felt over the whole
abdominal region. Bronchial and thorac
c affections are observed by Authors, as be
nt complications. I have noticed them
[illegible]
large proportion of cases. [illegible]
a crepitant hissing or rattling sounds are
their distinctive [illegible]. [illegible]
Characteristic and peculiar phenomenon
of typhoid fever is the rose coloured spots
or rose eruption of the skin. Some think
this peculiar appearance pathonomonic of the
disease, being [illegible]
[illegible]
[illegible]
or beginning of the second. though it may
be later in the disease, and, as sometimes
happens, it occurs much earlier. It
has the appearance of a flea bite, slightly rais-

and disappearing under pressure. They first [illegible] upon the arms and neck. Later in the disease there comes out the small vesicular eruption, called sudamina. This is not so diagnostic, as it is [illegible] These miliary points are so minute, that it often escapes the observation of the attendant, unless watched for when they may be detected by passing the hand over the surface or looking obliquely.

All the symptoms laid down above do not occur in every case; for it may be so mild as not to present half the phenomena described, and on the other hand it [illegible] so malignant as to include worse and more pernicious symptoms. If the disease be of a more grave character, a combination of more serious symptoms is present. The pulse being very frequent and weak; not unfrequently reaching 140 and even more in the minute, though in most cases [illegible]

from 110 to 120; respiration from 30 to 40. Tongue very dry, brown, parched and cracked; sordes about the teeth gums and lips; eyes dull and inexpressive; countenance sunken and the of a dusky colour. Delirium considerable and persistant, of a low muttering form; headache buzzing or ringing in the ears, with partial deafness. There is sometime hemorrhage from the bowels; involuntary discharges; picking at the bed clothes, or catching at imaginary objects; wishing to return, when not absent from home, and if asked how he feels, says he is well &c. There may be among these grave symptoms retention of Urine. Perforation may take place here, adding all the symptoms of diffused inflammation of the peritoneum. Though this very untoward event occurs in any form of the disease, yet it seems according to the best authorities in this [illegible] to happen in the milder cases. [illegible] al view of the symptoms. I have given a sum

many of the very grave. This disease presents many varieties in regard to its duration. Some mild cases convalesce in 8 or 9 days, but more frequently it runs on to the third or fourth week. The average duration being about 3 weeks or between 20 and 30 days. Death may take place in the first week, but more frequently in the second or third.

The anatomical lesions and changes, which the different organs and tissues of the body undergo while labouring under the destructive ravages of typhoid fever seem to be almost innumerable. These morbid alterations have not failed to engage the attention of most pathologists since the disease first became generally understood. There is no organ in the body that has not undergone the scrutiny of these searching minds. There not [illegible] the most extensive anatomical changes, which take place in this disease, are those of the intestinal canal, and to con-

fine them yet to smaller limits, the lower portion of the ileum. The Spleen and other organ undergo great change, but still they are not comparable with those of the alimentary Canal. From the frequent diarrhoea, together with the great distension of the abdominal parietes, and pains of this region, it would be natural to anticipate from a priori reasoning, that there had taken place some great changes in the abdominal viscera. [illegible] tures of which will be looked at hereafter, have been proven to exist in [illegible], if not all the subjects of this disease, when examined after death. [illegible] course, to the changes of the glands of the bowels. Indeed some pathologists think [illegible] case, however mild, runs [illegible] its course without some morbid alteration in the small intestines. The glands of Peyer, as they are sometimes called the elliptical plates, or aggregated glands, seem to be the

primary seat of these anatomical changes. They are variously affected in different individual cases. In some instances they may be only slightly thickened, so as to raise them a little above the surrounding mucous membrane, or they may be raised two or three lines, rendering them very prominent and quite perceptible after death. Together with these alterations in their volume they may be of a red colour and softened. It seems to be a universal fact, that these plates become more or less inflamed or changed according to their proximity to the ileo-coecal valve. These being first affected which are nearest the junction of the ileum with the head of the colon, and diminishing in intensity of inflammation, as we recede from this point in the direction of the track of the small intestines. The number of the glands diseased may vary a good deal. [illegible] may be only one or two in some instances, or

There may be twenty or thirty
ber. The process of ul[illegible]
go farther than mere softening. The
elliptical patches are ulcerated [illegible]
like the inflammatory sta[illegible]
degree as they are more or less remote
from the extremity of the ileum. It
is said those glands, nearest to the valve
are older and this accounts for their
ulcerating first. And another reason
I think, would be that their number
being greater in that part, would in
crease their liability. The ulcers vary also
in regard to their depth. Some may
affect the mucous membrane only, so
that their bottoms rest upon the upper
surface of the muscular layer. Or it
may proceed to a greater depth and
not only destroy the mucous coat but
also the muscular coat [illegible]
tissues, till it [illegible]
Coughing, straining or any exer[illegible]

rupture the peritoneal coat, emptying the contents of the bowels into the cavity of the peritoneum. Or a process of separation may take the place of the fatal issue, so that the ulcers fill and cicatrization [illegible] the [illegible]. The ulcers are sometimes very large, being of an oval shape, and their long diameters corresponding with the long diameter of the intestinal tube, so that the lower of the ileum, where they are most numerous, presents almost a continuous ulcer, from two or three inches to six inches long. The mucous membrane of the intestines may be congested or engorged to such a degree as to produce hemorrhage from the bowels by exhalation without any ulceration of the large vessels. Besides the agglomerated or Peyer's glands, also the solitary mucous follicles are sometimes affected; and these latter may be al-

[illegible] precisely in the same way as the former. They may, indeed, redden and generally soften and ulcerate. Or they may they may be only slightly inflamed, [illegible] [illegible] [illegible] [illegible] reflex. The facts which [illegible] [illegible] [illegible] ed are not the only ones, which are found in a state of disorganization or indeed there seems to be no tissue in the body, entirely exempt from some change or other. Ulceration may be found in the duodenum, Œsophagus, pharynx and many other parts. If we refer to the observation of most pathologists, we find the spleen is more usually affected in this disease than in any other. Its volume is increased not by mere hypertrophy but by congestion, and in a great proportion of cases its consistence is materially diminished. Sometimes it is four or five times larger than

when in the natural condition. The pulsation is not large as we might expect with the pulsation of the descending aorta upwards against the diaphragm. In some cases the softening is so considerable, as to reduce parenchyma of the organ to a soft pulpy mass. It is stated by one of the best authors on this disease, (Louis) that the softening is not the result of any inflammation, for this is never any pus found in the organ, but of congestion. The liver even has been found softened and in some instances very much diminished in consistence. Though the liver suffers sometimes a very considerable change, yet it is not so frequent as the spleen. The lungs have been found solidified, but this may be a mere complication, as actual inflammation of the substance of the lungs does not occur in a very large proportion of cases. The mucous

and coats of the arteries are in some instances softened. Lesions of the brain are far less, than would naturally have been supposed, from the symptoms presented by it. The changes occurring in this organ, according to Chomel, are effusion between the arachnoid and pia mater, vascularity of the latter membrane and a rosy tinge of the cortical substance. The most important alteration in the blood, consists of a diminution of its fibrinous constituents. It does not show the buffy coat when taken from the arm, and is not so readily coagulated, but sometimes remains entirely fluid.

Writers, in regard to the causes of typhoid fever, are very diversified and unsatisfactory. Some contend for the contagiousness of this disease, and adduce many evidences that it is just as contagious as small pox or measles, oth-

ers, and I believe by [illegible] majority think it non-contagious [illegible] many and more plausible facts to sustain their position. I have [illegible] seen a case of this disease, that could be traced to the influence of contagion, though I have seen many that apparently rose from other causes. True I have seen it attack different members of the same family in succession. But how often do we see dysentery and many other diseases, do the same thing, when they come in an epidemic form. Under such circumstances we can always attribute it to similarity of constitution or exposure to the same epidemic cause. No latitude or country is entirely exempt. It may occur on the mountain top, or in the valley; in crowded cities, or isolated regions; though some parts are more obnoxious than others. I believe is a fact, which has come under the observation of most every one,

[illegible]

[illegible] character, and bear many of its features. I have very clearly seen this among the bilious fevers and pneumonias of my own district. It is the observation too, of some that it occurs less frequently in these (Malarious districts) than in [illegible] I believe though when it does visit these miasmatic countries, it is of a more aggravated form, in consequence of being complicated with bilious derangement. Young persons removing from a healthy situation, in the country, where the atmosphere is pure, to a large city, where it is the reverse, are more liable to this fever, than those who reside there. Consequently we venture infer that [illegible] ventilated places, such as densely populated cities, hospitals, camps, forts &c. are habitats of this malady. In fact

it has been noticed to occur more frequently in these places than others. That Typhoid fever comes sometimes in an epidemic form, attacking the inhabitants of a whole district, can not be doubted. For we are witnesses of the fact every year, in some portions of our country. It may also occur in a sporadic form, isolating one particular individual from a whole community.

Age exerts a great influence over the disease. The very old being almost entirely exempt and Children less frequently attacked than adults. The age at which Typhoid is most likely to occur, is between that of eighteen and Thirty and the number of cases diminishing gradually from that until fifty; after which very few cases occur; though we are not entirely exempt even at extreme old age. Why is it that this disease has such choice for this period of life? Is it because the System is more

susceptible of this age? [illegible]

lesions are more [illegible]

ness of this [illegible] of [illegible] at-

tacked from a second attacked afflicta-

do? If this latter be true, it will

be [illegible] to sustain the consti-

tutional [illegible] and act as exciting

causes. Exposure to extreme vicis-

situdes of temperature, may obtain

an attack of typhoid, when predisposed

to the inhalation of putrid effluvia

exposure to the decomposition of [illegible]

animal matter, or altitude depressing

influences are [illegible] to be [illegible]

cause.

After considerating

disease thus far, through the symptoms

causes anatomical lesions &c. We now

come to the treatment [illegible] to

be carefully studied [illegible]

the healing art, as it [illegible]

different forms, and has so many compli-
cations; or is prominently marked in
so many other diseases, that the diag-
nosis is not only [illegible]
but also other maladies and made
obscure and doubtful by it. I do not
mean that other diseases, presenting the
character of typhoid, have essentially
its pathological lesions, but that
they are stamped with some of its
prominent symptoms: hence we
have Typhoid pneumonia, Typhoid
dysentery &c. Typhoid fever, as it oc-
curs in the [illegible], [illegible]
other complaints, is not of difficult
and uncertain diagnosis; for the [illegible]
ments are [illegible], [illegible]
together, and so peculiar and char-
acteristic, as scarcely to leave a [illegible]
of doubt upon the mind of the obser-
ving physician. But sometimes it oc-
curs with the symptoms so poorly de-

retospect, [illegible] most of the [illegible] phenomena wanting; and [illegible] circumstances there is no mystery in the art of distinguishing diseases [illegible] difficult to unravel, or more calculated to baffle the skill of the most experienced practitioner. We [illegible] not expect to see in every case of typhoid fever, the great multiplicity of symptoms, that is described in the books. Nor would it be necessary that all of them should be present, to make an accurate and unequivocal diagnosis. If we were called to see a patient, and he tells us that he has been sick for the last week that he has been gradually getting worse, that his sickness commenced with chill, and he afterwards had fever, which he has had every since; [illegible] his pulse frequent and weak; skin hot, tongue dry and brown, or sordes about the teeth and lips, with great

diarrhœa, tympanites, low muttering delirium
[illegible], [illegible], [illegible] rose spots.
Could we doubt for a moment the character of the disease, or say that it is any thing else than typhoid fever. Indeed these symptoms may not always be present, and still the diagnosis may be of no equivocal character; for sometimes we see no diarrhœa, no tympanites, and no rose spots; but the condition of the vascular and nervous systems, together with the general prostration is sufficient to determine the [illegible]. Now and then, we meet with [illegible] we call typhoid having most of the character of that disease, and resembling it in every respect very closely, but by post mortem examination we are [illegible]: such an instance is that given by Louis, who located his patient for typhoid, but after death found no lesions of the glands of Peyer and cerebral [illegible].

Typhoid fever resembles very much in its general aspect that of Typhus. So much so indeed that [illegible] and [illegible] ing medical men, and English Physicians generally, who believe they are the same. But if we draw a portrait of each disease in our minds eye, we can very easily see the difference, and I do not think either is [illegible] diagnose so far as the other is concerned, if we take together all the symptoms and circumstances of each disease. Typhus fever does not commence so slowly and gradual as Typhoid, and the latter is of longer duration. Stupor and delirium though common to both, usually commences earlier in Typhus, and debility seems to be more common in the latter, particularly [illegible] stage. These symptoms are not [illegible] distinctive; but there are others which show more clearly the difference. Instead of

diarrhoea as in typhoid, there is usually some degree of constipation, or at any rate does not [illegible] susceptibility to the action of cathartic medicine. And in place of distension of the abdomen, there is flatness, with no pain in the right iliac fossa. The duskiness or ashy colour of the skin is almost peculiar to typhus, though it may not be wanting in some cases of typhoid. When pain exists in typhus it is said to be usually relieved by pressure. The odour exhaling from the body in typhus is somewhat peculiar, so much so indeed, that writers say they can diagnose the disease by the sense of smell. The rose spots seldom come in the latter disease, and when they do they are always more or less mixed with its own peculiar eruptions, while the characteristic spots of typhus fever is easily distinguished [illegible]

spots of typhoid, by their not disappearing under pressure, by being more irregular larger and coming in greater numbers. Age epidemic influence locality and many other circumstances may determine the disease. When all these marks fail to give us any correct knowledge as to the disease, the mystery may be revealed by an autopsy. In typhus fever there is seldom any alteration in the glands of Peyer and the mucous follicles; but in typhoid we most always find some change in these parts. In the latter disease also there is always some enlargement of the Spleen, which does not happen in [illegible]. Typhus is frequently confounded with bilious fever. When this latter disease assumes the typhoid condition [illegible] may be somewhat difficult; but in ordinary

cases they are easily told. Bilious never has not the abdominal symptoms characterizing typhoid; such as the diarrhoea, tympanites, gurgling in the right illiac fossa &c. Nor has typhoid the yellow complexion the bilious vomiting, the decided remissions, the tendency to terminate in the intermittant form, the short duration &c. [illegible] of the brain is sometimes taken for typhoid; and so have been other diseases, all of which, may be known by due regard to their symptoms.

[illegible]

may see, and appreciate the symptoms as they arise; he may diagnose the disease accurately; and he may treat it very skilfully; but when he is called upon to give his verdict whether the patient will recover or not; [illegible] comes the most trying point. He may have apparently a very [illegible]

thing may be doing as well as could be expected, and seemingly the patient is getting well. But prostration may now take place and bright anticipations of recovery, in a sudden change, hopelessness and despair. On the other hand, in case of this lesion, however severe it may appear, should be pronounced inevitable death, for the patient may rally under the most desperate circumstances. Even cases of prostration have been known to recover. The signs, which prognosticate unfavourably, are long and persistent delirium and stupor; twitching of the tendons and epileptiform spasms; a feeling on the part of the patient that he is well, or a disposition to return home when not absent; incoherent talking and muttering, together with unmeaning signs and motions; pulse very frequent and weak, [illegible]

at one hundred and ten, to over hundred and thirty; involuntary discharges; picking at the bed clothes; retention of urine great distention of the abdomen; excessive diarrhoea and profuse hemorrhage from the bowels &c. These are not uni- prognostics of death. When the tongue is disposed to clean, particularly from the tips and edges; when the pulse les- sens in frequency, and the cerebral symptoms abate; when the patient be comes cheerful and lively, and takes interest in surrounding objects; and the discharges assume a natural colour &c. we may prognostical. favour- able

There are few deseases in, the catagory of medicine, about which here exists so much diversity of opinion, as, and to treatment, than the one about which I am now discoursing. No very marked

improvement has been made since first it was described as a distinct malady; that is, no one plan has been laid down, as a guide, by which the various forms and grades may be treated intelligently. Every Physician has his own favorite mode of treatment. Our treatment should always be founded upon rational principles; as this is one of the diseases which can not be treated successfully by empiricisms. At one season, we may have to combat with purely sthenic forms requiring of course more or less, the anti-phlogistic treatment; and at an other season or in another epidemic, we may have use for the very reverse the supporting plan. Some advocate depleting measures, others emetics and cathartics, others again the tonic and stimulating plan, so that almost every mode of treatment that could be devised has had its supporters

We have one great tendency in this fever, which keeps us up in mind to its ready occurrence, and offers a valuable indication for our remedies; that is the tendency to a prostration of the powers of life. Knowing this feature, in the disease under consideration, it teaches us to use depletion with caution, and to look towards an opposite mode of treatment.

Now the grand plan of treatment is what modern Writers call temporizing or expectant. That is to do little or nothing, untill the development of some symptom or circumstance, which shall call for our interference. This is one of the many self limited diseases, with which we have to contend; as much so as either measles or Smallpox, and runs a certain definite course, as proved by its different stages and each stage having its own train of phenomena.

We do not expect to shorten the disease to any very great extent, but to assist Nature in conducting the patient to a safe termination.

The general indications of treatment are, 1st to remove all irritation and vascular excitement, 2nd to subdue local inflammation, and 3rd to support the failing powers of life, until the disease runs its course. To meet our first indication, and assist in the cure, we must remove all sources of irritation and depressing influences; and to effect these ends, a well ventilated apartment is necessary. After removing the patient to his bed we should judge from the condition of his system, and from the prevailing epidemic, whether blood letting would be required. Though very rarely practised blood letting is highly requisite in some cases in moderating the course of the de-

sease. If the pulse be full and strong febrile excitement high, the prevailing epidemic of a sthenic character, and determination of blood to the head, we may venture to take blood from the arm; but it should always be done with caution, knowing as we do that the desease has a certain course to run and that there is always a tendency to prostration and debility. If there are no symptoms in the first stage that would positively indicate general blood letting we seldom require it afterwards. Not more than 10 or 12 ounces should be taken at a time, but repeated if absolutely necessary. Topical blood letting is of high utility throughout the whole course of the desease, when ever we suspect local and disorganizing inflammations.

As the bowels are very susceptible to the action of purgative medicine, and as, they are easily irritated by substances which

make a strong impression on them, we should avoid the use of drastic cathartics. They should be evacuated in all cases by mild aperients, so as to prevent acrid and vitiated matters from accumulating in the and thereby keeping up a source of irritation. For this purpose we may use the sulphate of magnesia or castor oil or magnesia. If there be much debility, so that any amount of depletion would be hurtful, we should prefer castor oil to the others mentioned, as particularly if there be much irritation.

Diaphoretics and refrigerants are unquestionably serviceable in the exalted febrile excitement. Where the skin is hot and dry, and the thirst great &c. we would expect this class of remedies to be of some advantage, at least in reducing the temperature of the skin, and making the patient more comfortable. The testimonials have been used here from their determinate action on the skin, and also from their

power of reducing the action of the heart and arteries. But it is obvious they can only be used in the first stage, when there is no debility, and no irritation in the mucous membrane of the alimentary canal. The Citrate of Potassa in the form of the Neutral mixture or effervescing draught is an excellent refrigerant in these cases. It is very grateful to the patient, and allays the irritability of the stomach. From 5 to 15 grs of this drug may be given in solution, according to circumstances and given every one, two, three hours as deemed necessary. When we wish a more stimulating diaphoretic, it can be found in the Acetate of Ammonia. When much nervous disturbance a little Spirits of Nitric Ether is a useful remedy given in combination with the Citrate. To assist these remedies, cold ablutions and sponging will be very beneficial

For this purpose we may use simply cold water, if agreeable to the patient or vinegar and water, or if much weakness, spirits and water. In some cases no other treatment than that above mentioned is required.

But in the majority of cases there is always some local complication which calls for treatment. When the diarrhœa is very profuse and exhausting, we should use some means to check it. We should first try a few drops of Laudanum, given after each evacuation and if this fail more active means should be employed. Some chalk mixture, or Opium and Kino, or other Astringent remedies, will generally succeed. When there is hemorrhage from the bowels, the acetate of lead, combined with Opium, should be given. The tenderness of the abdomen or tenderness in any particular region may be relieved by taking a few ounces of blood by

leeches, and then using large mustard
tices over the under parts. When there
is considerable tympanites large emolli
ent Cataplasm over the whole abdomen.
For the treatment of the delirium, the
head should be shaved, and blisters ap
plied over the whole scalp. On obstin
ate vigilance and restlessness at night
a Dovers powder, or morphia may be
given when not contraindicated. It
is necessary in some cases to employ
stimulents throughout the disease. Mer
cury is employ in those case where the
secretions are all very much diminished.
In fact is useful in most every case to keep
down local inflammations. Turpentine is used as
stimulent and alterative on the mucous tract.
The bladder should be attended to, and drawn off
when necessary

An
Inaugural Dissertation
On
Typhoid Fever
Submitted to the Examination
Of the
Provost, Regents
and
Faculty of Physic
of the
University of Maryland
for the degree
of
Doctor of Medicine
by
William N. Martin
of
Carroll County
Md
1853

To

Geo. W. Millenberger, M.D.

Professor of

Materia Medica, Therapeutics,

And Pathological Anatomy,

In admiration of his judgment and skill in Medicine.

And in grateful acknowledgment for his kindness.

This Thesis is dedicated,

By his Friend and obedient Servant,

The Author.

Introduction.

"The Healing Art" How noble its every attribute, and how divinely Beautiful, its every feature! From the dawn of the first morn's sun, upon our terrestrial ball, we have seen its worshippers, at its shrine.

The blessings emanating therefrom, have been shed alike, upon Christian, and Anti Christian; King and Peasant; the halls of wealth and prosperity; as well as, the hovels of poverty and despair; have their numbers of Gratitude and Love, to sound in honor of our "Healing Art".

Although time's avenging hand has considered, no work, of Man - too sacred, or too Beautiful; to remain untarnished, by his defacing Grasp: The waves of ages as they have rolled, into the ocean of Eternity; have borne upon their bosom, the wrecks of Nations and of Learning. Yet! this structure like an emanation, from Heaven - has grown brighter; with the lapse of Ages and the crush of worlds.

In considering the complication of man's formation and the many ills, to which he is heir, and; find the means of relief, from the sufferings, which have been entailed, upon the human family:

are placed in the hands, of the Physician, 'tis then, that the dignity of our Profession, stands forth, in all its Beauty and worth.

When we take a casual glance at the many diseases which rack man's Frame, or view the agonizing Pains which thickly strew the path, of disease Is there a being; however lost to the manly feelings of the soul? who would not glory in relieving this suffering? And instead of disease's stern and haggard visage; to reinstate the joyful and Placid smiles of health.

Such, are the duties and pleasures, of the Physician. Like the Good Samaritain we find him at the couch of suffering, robbing it of its misery, by the means, which the God of Hosts has placed in his hands- And Base is he who prosecutes the study of that time Honored and revered, science with no other view, than the gratification of selfish interests.

Hoping as I do to possess the Qualifications, deemed necessary by your Honorable Body, to qualify me for the duties and responsibilities, of the noble Dig

ession of Medicine, and within whose Walls I have sewing a pupilage, whose labors have been arduous, and whose studies, profound; These studies, which effect the mind, with strong emotions of curiosity, not unmingled with awe, I have advanced a certain distance; But in advance, he sees is little, when I behold its numerous avenues - and the immensity of its depth; I am forced to admit, that; I have but one drop, as it were, from the immense reservoir of Medical Learning. —

I have observed the outward form and configuration of the Body, examined its internal composition and structure, and learned, what is known of its various endowments; the working, and uses of its numerous parts, & harmony, which exists; by the co operation of these parts in health; and the discord, which is there presented, when either or any of them become vitiated by disease —

This then is the Physicians province, with this view have I contemplated, the study of that:

Profession - which! venerable from all antiquity, yet; in itself "ever new"! Even in its infancy, when on the clouds, of Ignorance and Superstition, shaded the earth; was Medicine a Glorious Science - And its Professors were ennobled and exalted, by its influence; And as that mantle descended, through a long line of illustrious successors; we see Medicine, progressively expanding - and when the night, of Barbarism hung Gloomily around, we see its genius triumphing over the surrounding darkness, and shining as a Beacon, to the shipwrecked mind of man. And, in our own time; though the mind, is making rapid strides, to the pinnacle of truth and Science - Medicine, has kept pace with her sister sciences; And it is a gratifying reflection to think, that; among the most distinguished promoters, of the collateral sciences; Physicians, have held, and do, hold a commanding rank; Thus proving proving themselves pound st in knowledge, - as they have ever been philanthropic; in Both private and public charities

And in all; good will to man.

Gentlemen — Nothing is more difficult for the Student, than the selection of a subject for his inaugural dissertation, — and when selected; to cull from its branches, such ideas as may be worthy of presentation to your intelligent and Honorable body.

The subject which I have chosen as the theme of my inaugural thesis is Typhoid Fever, a disease, the cause, Pathology and Treatment of which; have called into action, the minds of our professional most gifted sons — Yet there is nothing within the pale of Pathology; about which there is so much discrepancy of opinion. It is therefore, to be considered a matter of surprise if novices, as I am, should be driven, about, upon the restless waves of Theory and Speculation; when such diversity of opinion, has existed among men, whose judgment has never been been called in question.

Should I, in the following pages, offer any ideas contrary, to the admitted facts of the science it is done with all respect due from a Student

to your Honorable Faculty, and if in my presumption I err, attribute the fault, not to the head, but to the mind — As my my subject is Fever; and no other can be, more interesting to the Physician. Because t'is the most universal, and most fatal of all diseases, which have been entailed upon the family; it may not be amiss for me to bring to mind some of the theories advocated by the sons of our profession, whose voices and teachings have been hushed; among the disciples of Galen.

The Physician must always be prepared to expect its occurrence, it is, that; by the presence or absence of which all his views of treatment are to be regulated, whose rise, progress and termination he always watches; and by the degree of which he is enabled to estimate, the danger of his case —

Some idea may be formed of the mortality of Fever from the writings of the illustrious Sydenham who states, that two thirds of mankind die of acute disease so termed.

Fever has proved a fertile theme, for the working mind of the Physician of all ages & glean all attention, which it has received, at the hands of every medical writer; both ancient and modern would be sufficient, to impress upon us minds the importance, of the doctrine it embraces.

The difficulties, connected with the study, may hence be inferred. Although so much has been written concerning it, there is no subject in the whole circle of medical science, which still involves, so many disputed points. I will now refer to some few of the many doctrines of Fever - which have been propagated by the early teachers of medicine. The earliest opinion on the nature of Fever, is that propagated, by Sydenham - who imagined it to be a salutary effort of Nature, to throw off some Morbific matter contained in the system. The celebrated Cullen advocated the same doctrine, and considered that, when the morbific matter, was too abundant, fevers then became hurtful. Natu

gave way to her salutary efforts, and sank under its influence.

Hoffman believed, that fever, consisted primarily in diminished energy, of the nervous system. Cullen, went a step farther, and taught, that the diminished energy, of the Brain; brought on spasm, of the arterial vessels; which spasm was the real proximate, cause of fever. It is here, that Dr Cullen, with many others, may be considered, to have erected a false structure; upon a true foundation, it may be said; to be impossible, to continue his first principles; in his doctrine of fevers. But immediately afterwards, he becomes hypothetical, and almost every succeeding step, becomes enormous. His misapplication of the powers of Nature, which, never operate except, to produce order, and health in the system; and his spasm of the arterial vessels, are the result of Hypothesis alone. The principal, allusion, to, is; that fever, has debility, always as its, precursor. If we trace the early records of medicine,

we find that the Nature of fever, has afforded an ample field for discussion, from the time of its earliest Teachers, to the present day. Both the Solids and the Fluids, have been investigated, and arguments adduced in support of the opinion, that a morbid condition, of one or the other system was the cause of Fever. And, after so many disputed points, what theory is to be admitted? To this answer, that the human Body, like all others, is capable, of being acted on; by Physical agents; and the Effects; not the mode of their operation, become apparent and the senses are the instruments, by which we are apprized of those Effects As these instruments, discover, only exclaim phenomena; without apprizing us of the subtle changes, which the system undergoes, and by which, they are produced,

All we can say is, that the Phenomena; are all we know - And that the true Philosophy of Medicine, is, to describe, their successions - with the means of their, prevention and cure -

This it can do: But, it can do no more.
As in, Natural Philosophy, it is impossible to determine, the nature of gravity, on which hang the laws, of that science. So in medicine, the intimate properties of life, health and Disease; are equally inscrutable. The effects of the principle upon other bodies . . . as all we know. Hence the ideas of Hedge contained in the following words, presents a true view of the subject of Fever, and one of which is free from Hypothesis, and is consistent, with the best Philosophy. Fever say that celebrated man, is a disease which effects the whole system.
It effects the Head, the Lungs, and Stomach, the circulation, absorption, and the Nervous System — it effects the Muscles and the Membranes — it effects the Body likewise the mind: It is therefore a disease of the whole system, which, however, it effects unequally. At sometimes one part, and at others another. Fevers of all kinds, says Dr Rush are preceded

by Causal debility, and, that debility is the p
ost link, in the chain of Fevers.
'Tis upon this, that the, doctrine contained in
the following pages, shall be paredicated.
That, Typhoid Fever, is a desease of debility ca
used, by some exciting cause. The Symptoms
shall be my best supporters, 'tis stamped up
on every part of his system. And the Patient,
in a word is said to droop.
Typhoid Fever, may be considered to be an in
flamatory desease "Sui Generis" affecting the
mucous follicles and Glands of the small
intestines-Mesentary &c— causing debility of
the Blood vessels which, nourish the parts,
That the desease is inflamatory in its cha
-cter, is proven by the Lesions which it pro
duces- which are principally seated, with
in the abdomen. occupying the follicles
of the Ileum (commonly called Peyer's Patches
situated near the Ileo coecal valve) The
Mesentric Glands (called Brunners Glands)
and the spleen. The glands and mucous pol

become red, thickened and often pass into a state of ulceration these evidences of inflammation are indeed perfect; hence we may say, that the disease of which, I am speaking is inflamation of the glands, and mucous follicles of the intestines, and that, through this affection, caused by a certain exciting cause is produced that general bassilude which so distinctly marks the disease.

Untill recently, the two leading varieties, of continued Fevers viz. Typhus and Typhoid, have been considered as one and the same disease, by many of the writers on the continued Fevers of Great Britain and Ireland; the only distinction admitted by them - as to these diseases is that, of the severity of their symptoms. But through the labors of the celebrated Louis; in his anatomical researches; we have been able to draw a line of demarcation, and show that the diseases, though allied are seperate and distinct.

The pathological investigations of that celebrated

anatomist has proven to all, the wide difference which exists between these two leading forms of continued Fever, which have been considered as the same disease. The widest difference between the two diseases, is found in the abdominal lesions, which are very constant and striking. They are so well marked and so invariable that they are easily stated. In Typhoid Fever, there is a peculiar and constant alteration of the elliptical patches of the Ileum consisting of various degrees of thickening changes of consistence and color, and especially of ulceration. In Typhus, these plates are very rarely altered, and, when so at all, to a very trifling extent. In Typhoid Fever the isolated follicles. Both of the large and small intestines are found to have undergone the same changes, that occur in the aggregated follicles. In Typhus Fever, they are found in a healthy condition. In the mesenteric fever disease, the mesenteric Glands, corresponding to the altered and ulcerated follicles; are reddened, softened and augmented

ted in volume. In the latter they are unchanged in any respect. In Typhoid the lymphatics are usually more or less distended, with fluid. In Typhus, they are not.

The spleen is enlarged and softened, in a considerable proportion of cases, in both diseases. But these changes, are greater and more frequent, in Typhoid than Typhus. The accessory symptoms are also different, in Typhus, Pneumonia is most generally the thoracic complication. In Typhoid - a dry sonorous or sibilant rhonci constituting - Bronchitis - The cutaneous eruptions which characterize the two diseases are very dissimilar. In typhoid fever, the spots are pretty uniformly oval and circular, varying but little in size - sometimes slightly elevated; readily disappearing under pressure, and very numerous - confined generally to the skin of the chest and abdomen - of a bright rose color - they mark their appearance, generally about, the commencement of the second week - In typhus they are more irregular, in their shape and si-

ze – not elevated above the skin – not disappearing under pressure – often abundant, and even confluent – often it is occupying the skin of the extremities – as well as, the trunk assuming a more dusky color, than in the former, disease sometimes they consist of Petechia, or extravasations, which, in fatal cases persist after death – this eruption appears earlier, in Typhus than in Typhoid Fever, The dingy color of the skin the dusky suffusion of the face – and, the dark injection of the conjunctiva are peculiar to Typhus The mode of attack of the two diseases, may nearly resemble each other. But as a general rule Typhoid Fever, is gradual in its onset it creeps on treacherously and obscurely –

Whilst Typhus makes its onset suddenly, and without any lingering premonitions much frequently than Typhoid —

Causes of the disease form, an interesting and most important subject, for our investigation; all the researches, and all that has been done in this department of

the science. The absolute cause, of the disease is still involved in obscurity; a veil of doubt almost impenetrable, still envelopes it — we are still borne upon the waves of speculation, and uncertainty, as to what, is the Great first cause, of Typhoid Fever;
But, from our present knowledge, of the malady, they may be divided into predisposing and Exciting causes — From the premises it will appear that a certain predisposition, must exist, as is necessary, before the exciting cause, can produce its effects, That is, the equilibrium of the system must be destroyed, and the harmony lost, which exists among, its functions in a state of health;
The predisposing causes, are many, and we may always, be surrounded by them. Any thing may be considered as a predisposing cause which, has a tendency to weaken or enfeeble the strength of the system. Hence scarcity of food; or food of bad quali

ty, is looked upon as a fruitful, predisposing cause. From the reports on the Epidemic fever, which has at various times visited Ireland; all the medical writers, allude to the insufficient supply of food among the inhabitants of the district, where it raged. Insufficient or unwholesome diet, not only weakens the system by impoverishing the blood and causing emaciation; But likewise depresses, the nervous energy. Hence under such a state of debility, it is more easily acted upon, by the exciting causes of Fever.

Extreme bodily fatigue, may also be considered, among the causes, which tend to impair the natural vigor of the system, and renders it an easy prey, to the exciting causes of the disease. Another set of predisposing causes, are such as give a sudden shock, to the Nervous System. The various mental emotions, as - Fear, Grief, anxiety, disappointment; long continued watching at the sick bed - intense study; want of sleep

may severally be considered as predisposing causes.

As to the exciting causes of Typhoid Fever, we find many theories propounded, by the teachers of medicine; and for me to define the cause, would perhaps be an undertaking for the completion of which, I should be found inadequate: But that it is a subtle poison, which contaminates the system: and, by which we may at all times be surrounded; but whose effects, are governed by the conditions of the system — by a certain state of debility, which is no sign in enabling it under its influence — in this supposition, the results of medicine will support me in saying that Typhoid Fever, is depended on some such poison; but whether, that poison is generated by the decomposition of animal or vegetable substances, or from some other source; is yet, and perhaps ever, may remain a matter, of thought and speculation. Though it seems probable from some facts

that the exhalation, from vegetable matter, in a state of putrefaction, is more injurious than, that, from animal: From the circumstances of the prevalence of the disease in some particular places, and the number of persons, who have become affected, after, residence, in these situations, where it has been found to exist; it has been concluded that fever, may arise from a constitutional atmospheric poison generated in such localities. The doctrine however, is plausible; which attributes the exciting cause, to some peculiar condition of the atmosphere - or that the atmosphere, holds in solution, as it were; this subtle poison, and when, after a certain period, which might be called the period of incubation; the system is reduced to that point at which all the effects peculiar to Typhoid Fever become apparent. The foetid poison, however produced may be termed - Miasma, (From the Greek importing corruption, pollution or defilements or Malaria (from the Italian importing

bad or impure air, may be applied —
It is well ascertained that vegetable as well as animal substances, in a state of decomposition, emit effluvia, or exhalations which, prove hurtful to the human body; and when applied in a state of sufficient concentration, produce serious illness, even death; on this account, all febrile poisons are supposed to arise, from one or the other of these sources, or from a peculiar unknown pestilential condition of the atmosphere to which, from the numbers of persons simultaneously affected, the term epidemic, has been applied. We know very little about about the physical qualities of emanations or vapors, beyond their noxious effects upon the human body — they are invisible and possess neither taste or smell; Chemistry too, has failed to unfold to us their nature —
Symptoms — as symptoms are the effects and not the cause of disease, they are therefore of intense interest, to the physician. They are

indeed the language of disease. It is the medium through which a suffering organ conveys, to the Physician, the sentiment of organic pain which may then be being or has taken place.

It is through the intelligence, conveyed by them, that our diagnosis is established; our prognosis formed and our treatment guided. Hence the necessity of observing minutely each particular symptom, and of rightly appreciating its import, relative. As words are the means of conveying, thoughts and emotions; In like manner does disease operate vividly and intelligibly through the medium of its peculiar symptoms. There is no disease perhaps, in which the primordial symptoms are, as so diversified, as that of Fever. This is owing to the general resemblance observed in the commencement, of all febrile affections, whether Idiopathic or Symptomatic, and it is not untill the symptoms, have ceased to be common, that the specialities, is evolved

to discriminate the precise nature of the disease. Vigor and Ability seem to be the chief means, by which this formidable disease, makes its inroads upon the system; it is evinced by the disinclination to mental exertion, the individual is rendered unfit, for the performance of any ordinary mental effort; his perceptions, become less clear and distinct, than usual or, we might say, that, his wonted mental energy is wasted, & this condition of the mental powers, which, perhaps a short time since, shone brightly, and might have bedeckt, a myriad of souls, by the power of its words; or by the profundity of its thoughts, could dive into the darkest recesses, of Nature's hidden mysteries, and illume them, as it were, with marvelous brilliancy; is added the diminution of muscular strength and vigor. The patient feels fatigued, and if he attempt, to walk, his movements are feeble and unsteady. The muscles soon become unwieldy and unable, to support his body, then the cancer is

comes not only the most easy, but the most indispensible, for the requirements of his condition. This condition of the patient Karinnes, has justly termed, Debilitatis Febrilis, The countenance undergoes a change, the bright, full and joyful countenance of health, is changed for one, full of Gloomy forebodings, and despair, it becomes sunken and pinched.— The alteration so marked, in fact, is intimately associated, with the condition of the muscular system, just described, and forms a diagnostic of great value, to the Physician; not only of the nature of the diseases, but also of the various changes which take place in its progress. This, just says a certain writer, to give in words an idea, of the febrile countenance.— This is a look of Anxiety, known only to those, who have watched by the couch, of such patients, denoting much inward distress. The features are pale and sharp, and the general expression is so changed as at once to alter, the expression of the countenance, since the familiar

impression, which is always taken from an improvement, in the aspect of the patient. And often times these premonitory symptoms, are wanting, the disease with all its terrors is ushered upon us at once; owing to the intensity of the infection, by which we are surrounded; and the state of great susceptibility, in which the system has been found, and according to the poet.

"The life of all his Blood
Is touched corrupt'bly - and his purest grain,
Which, some suppose it be the soul's fair dwelling place,
Doth by the idle comments, that it makes -
Foretel the ending of Mortality"

But the regular invasion of the disease, was generally, marked Symptoms by Headache, Giddiness, Restlessness and an indisposition to exertion, alternate chills and hot flushes, with uneasiness or pain at the pit of the stomach. These symptoms, are generally succeeded by pain in the Back and loins, burning heat of skin flushing of face sense of weight, heat & giddiness - ringing sound in the ears Pulse frequent

and soft, the digestive organs are deranged, the tongue is coated with a thin white fur, which gradually becomes thicker, and of a brownish color; sometimes it is clean but morbidly red; the mouth is clammy - from a superabundant secretion of mucous. - As the disease advances the delirium, which was only slight at first becomes aggravated. - instead of recurring only at night; occurs frequently, during the day the hearing becomes dull. - the patient may stupid. answers questions very slowly or not at all - a complete indifference, both towards himself, and surrounding objects - each day as it passes seems to rob him of some portion of his strength, and presents new symptoms, in connection with those already existing. Epistaxis is often, present in the early, as well as the later periods of the disease - and indeed, in the early stage of the attack, it is of apparent relief to the patient, as by relieving him of the at, plethora and fulness of the head; of which they so often complain. But a later stage of

the disease, when the patient's strength has been wasted, by the inroads of disease, 'tis then a dangerous, and often, a fatal complication, for 'tis then the Patient will require a thousand ing, of all his blood to enable him, to withstand the ravages of that poison, which has so corrupted his system. The same may be said of other Hemorhages; of which, I will speak more fully – For the sake of convenience, I will adopt the plan of Dr Watson and others, by dividing the disease into weekly periods, and noticing the symptoms, in the order, in which they occur, – Not that there is any such periods of seven days, accorded to particular symptoms, But that in, the simplest forms of the disease – where it runs its course most evenly, and favorably, there is a succession of different sets of symptoms, which occupy about that space of time, nearly enough, to allow of my basing as a help, of better classifying the symptoms as they occur, The principal symptoms belonging to the first period of seven days, belong in

ciple to the, sanguiferous system, the pulse becomes, more frequent than in health - There is increased heat of skin, and that; is adverse and throbbing of the temples. The pulse varies in different cases, it generally increases in frequency; and is always found; accelerated in in persons, who are of a nervous and irritable temperament; and most frequent in females than males - and in young than old persons. The more frequent the pulse, the more violent is the disease; But the frequency of the pulse, provided it keeps at the same standard - is not so unfavorable a Diagnostic sign as its unsteadiness. The patient is hot and flushed, he manifests indifference and stupor, muscular strength is remarkably reduced; so much so, that he becomes in a great measure helpless, and assumes the supine position indicative of great muscular debility.

Diarrhea is sometimes, present during the first stages But is more properly, considered as belonging to the second period - But it may occur at any

stage of the disease, the discharges are dry, and colored, indicative of Inflamation or ulceration of the Glands and Follicles of the intestines, in general no amelioration of the symptoms is generally felt, during the first seven or eight days; but the contrary; new and aggravated symptoms generally, make their appearance. and what has been termed typhoid symptoms, become more distinctly marked. It is in the second period, so termed, that this direful destroyer, of the human family presents, a truly awful aspect. In this period it appears to marshall, all its deadly strength, and fatal influences: a host of symptoms, more fatal in their tendency, are presented to our notice; The pulse becomes more frequent and weak. The tongue grows dries and more Brown, approaching a Black, Sordes of a dark color and unpleasant odor, accumulate on the Lips and Teeth, which, add much to the discomfort of the patient, as well as a more dangerous aspect to his condition. In this period Delirium, is most likely to ensue. The delirium

is peculiar; at first affects the patient only at night). Various eruptions present themselves. But the Nervous system, at this period, is still the most implicated: His voluntary movements become enfeebled, and irregularly performed. His posture is indicative of his weakness by a constant sinking down in the bed. He is not able to turn himself upon his side (Hence if we find our patient lying, on his side, or his knees drawn up - we hail it as a good omen of returning strength) other signs of muscular debility, dependent upon the sedative influence, exerted on the great Nervous centres present themselves, namely, faltering of voice, difficulty of deglutition, stammering becomes very great - We often find convulsive starting and spasmodic affection of the tendons and muscles. Termed - Subsultus Tendinum, which is often peculiarly marked in the movements of the Hands and Tongue: He is often unable to put out his tongue; that instrument of speech becomes an almost ungovernable organ

with a tremulous motion it draws to the roof of the mouth, or its passage is obstructed by the teeth; He is delirious at first only at fits and appears upon from a disturbed sleep,— as the disease progresses, the delirium becomes greater, the mind: that attribute of Deity; seems to have been dethroned, and he is now guided by the impulses, of an unruly Nature: He sometimes raves as a maniac, talks in a loud and vociferous voice; at other times— his ramblings, are of a more tranquil kind, and without agitation. His mind, seems as though it were disconnected from his Body— he talks as one muttering in his dreams— He may be aroused for a time this state of insensibility, by a loud voice or strange faces may for a time command his attention.— But soon again sinks into this state of Cryptomania. To this disturbance of the mind is sometimes added drafness and loss vision. Imperfection or loss of vision is a much rarer, and a more fatal Symptom, than drafness; the eye is generally dull; But unlike the

the staring and Brilliant eye of acute D. . . its. it agrees with a countenance, more perplexed, than at this stage of the disease, Black spots or particles seemingly, to be floating in the air, or sent themselves to his view, which he attempts to catch in the air pick from, the bed clothes. This may be considered as dependent, upon increased, sensibility of the retina, the mouth and tongue are dry, although the patient, no longer complains of thirst.

The fæces, may pass involuntarily, owing to debility of the sphincter muscles. his urine is may be constantly dribbling away. If these symptoms are present recovery, is very uncertain. An eruption or spots of a pink or rose color are peculiar, to the disease, and belong most exclusively to the second period. they are found generally, on the chest and abdomen, but are sometimes found on other parts of the body, The eruption is important for the fact, of its belonging legitimately to the disease, Sometimes these spots are numerous

at others few in number. They may be known by their circumscribed form, and pink discoloration of the skin, with little, or no elevation of the cutaneous surface; and by their disappearing upon pressure – This eruption does not make its appearance, suddenly or promptly – nor is its duration, of a limited time, it may sometimes disappear after the lapse of few days – and in some cases, they may be perceptible as long as a fortnight; in the latter case it may be probable, that a successive crop of spots, continued to arise – This rash stamps the disease with a certainty, if any doubt as to its character, have lingered. The Physician can now dispel his doubts, and be assured that he has the most loathsome enemy of mankind to contend with. Although the eruption is inseparably connected, with the disease – yet whether, it adds or not to its intensity – is a matter, which has not engaged the attention of Physicians. Diarrhea is another symptom belonging to the disease though

not confined alone to this period; It may occur at any time; But is a much more unfortunate occurrence when it happens so late in the disease;— owing to the great danger of ulceration which now exists; and of the prostration which it causes— When the stools are passed without the knowledge of the patient; it adds greatly to his dangers. There is seldom a complaint of pain in the Bowels—; but if pressure be made, especially in the region of the Cæcum; we will discover some tenderness, the patient will shrink from under the hand, and an expression of suffering will pervade his countenance, the character of the evacuation is indicative of the disease— namely:— Thin yellowish and ochery— When during fever, such stools continue from day to day, we have every reason to dread a most fearful occurrence; Ulceration of the Bowels, even no pain be complained of, when the Bowels are pressed—

Hemorrhage is another symptom, fearful and

fatal in its character, when it occurs in this stage of the fever. It often takes place unexpectedly; and in such quantities as to rapidly exhaust the strength: or it occurs at intervals, and in small quantities; wasting the patients energies, and causing death as effectually, though more slowly. The hemorrhage is generally dependent upon a division or opening of some of the mesenteric veins, by the ulcerating process, which is going on in the Bowels; It may also occur independent of ulceration; owing to the extreme depression of the vital powers, bleeding may take place by imbibition; caused by the extreme weakness and looseness of the texture of the sheaths or tunics of the Blood vessels, and the extreme thinness of the Blood, in such cases the Hemorrhage, is of the passive kind and is a symptom of the worst omen: —
The third period consists in the aggravation or amelioration of all the symptoms, I have been describing. It is in this period that the symptoms

have reached their greatest possible intensity. In this period he is either rescued from his suffering, by the cold, yet to him pleasurable grasp of death, or drooping and prostrate nature throws, throws off the shackles of his poisonous adversary, and is again reinstated to the pleasures of Health. But death is not confined alone to this stage (its victims have been found before emerging from the second - yea! even the first, has felt his cold embrace.) The period of Death, is dependent, upon the intensity of the poison; and the malignancy of the attack.). If the disease is about to terminate favorably, the most aggravated of the symptoms abate. The temperature of the skin, becomes more natural, the patient notices, what is going on around him; His pulse becomes less frequent - The tongue is moist and cleaner at its edges - Evacuations from the bowels - less numerous - more consistent, and more healthy. He no longer passes

them involuntarily, But gives notice as is to assistance

Treatment — There is no disease of equal frequency and importance, about which, there exists so much diversity of opinion as regards treatment. Active, Bold, and Vigorous, means have had their supporters, while on the other hand the so called plan, has found countenance, within the ranks of Medicine. For me to model any mode of action suitable to all cases of the disease, would be found futile in the extreme; For, as the malady in different epidemics, or in different seasons appears as it were, in different Garbs, so does it require varied modes of Treatment. Many have been the methods proposed, by the Sons of Galen, to cut short or jugulate this scourge of man; but they have all tired to see their favorite plans of practice, prove ineffectual and the disease, still rolling on like the waters of some mighty stream; though its varied changes, as though no means had been resorted to; to check its ravages. — Considering the disease, as all pathologists now do, as one which is self limited, to time and means and

will run its course in despite of remedies. I cite the words of my worthy teacher Prof. Lewis; Hygiene may terminate the disease; but in no case!
The profession has after years of experience and trial adopted, what may be termed, the rational expectant treatment, which implies a not interfering with the course of the disease, but to watch accidents or complications which may supervene, and make the patient as comfortable as possible. To treat the local affections and leave the general symptomatic care of themselves. To support the strength, which generally becomes so prostrate as to threaten him with imminent peril. To use the words of Bouveriusi "a simple plan of cure is to be recommended, in any disease, it is certainly to be adopted in the present. For the less the operations of Nature are disturbed by art; the mildest and safest the remedies, the employed are, the most successful, as we value the patient's health. — In the commencement of his attack the patient should be put to bed; his room as well ventilated as possible. If there is no diarrhea a mild laxative to clear out the bowels and remove all ina

taking matter, which may be time deposited with gen
nacy prove beneficial - if he should be suffering from
Nausea or sick stomach a mild emetic may be
administered in order to remove the irritating con
ents of the stomach, it should consist of ipecac
uanha, Ex Tartarum or Sulphate of Zinc - Tart. Emetic
would be unsafe, on account of its depressing &
irritating influence - Refrigerant Diaphoretics may
be useful from the very onset of the disease, the
most esteemed of which, are Citrate of Ammonia in
doses of from Vgtt 8 in Solution
The effervescing Draught and Citrate of Ammonia.
Ice and water hold a prominent position - Cold
sponging or ablution of the skin to any kind, either
in the mouth to allay thirst, Ice assuming a much bet
ter purpose, than water, on account of its not dist
ending the stomach - As regards, the use of Cathar
tics; they are not admissible in typhoid fever;
owing to the tendency to Diarrhea, mild laxatives
being always sufficiently active to produce one
or two evacuations, during twenty four hours, the
best of these aperients are Castor oil and Magnesia

nesia; The former being preferred, because it merely empties the Bowels without causing any irritation. The next object is the allaying of Irritative symptoms. When there appears to be much sanguineous determination to the Brain or any other of the vital organs It is sometimes proper to take Blood from the arm of a moderate quantity; if the patient is of a plethoric habit, and has a strong and vigorous constitution, with a full, frequent and strong pulse, - and, in the early period of the disease; But, blood letting as a general thing, is not applicable to cases of Typhoid fever Because it - is a disease, which runs a certain course and whose natural tendency is to debility, the patient will require all his Blood in order, that he may be able to withstand, the ravages of his poisonous adversary. Local blood letting, may be practicable in any stage of the disease, where we have urgent local symptoms or complications, as, in the violent head ache or in the tenderness and Pain in the abdomen so common to the disease, or in any local effection requiring the loss of Blood. The main use General Bleeding is to prevent, the advance, of disorganizing inflamation

when this indication is not present, we find better omit it altogether.

Should there be much pain in the head accompanied or not by Delirium, we had best take some Blood by cups from behind the ears or nape of the Neck. And apply Ice to the head. If could be able, tenderness be found in any part of the abdomen or much flatulent distension, it will be at the Epigastrium or any other part, take a few ozs of Blood by cups or Leeches, and apply warm fomentations as a large Mustard poultice kept constantly applied for several days until the pain and gurgling are relieved; in obstinate cases of abdominal tenderness, it may be necessary to apply a blister.

If the Diarrhea should not be very profuse; say not more than two or three evacuations in the 24 hours you need not pay much attention to it; But should it become straining, astringents or opiates such as opium Acetat. of lead, Kino and Tannin Sometimes have these will be found inadequate to check the discharges; our much esteemed Brethren

of Materia Medica, says that he has found a combination of Sub. Nit. Bismuth and Magnesia very effectual in checking the discharges, when other Astringents had failed. This was apparent in my own attacks of Typhoid Fever during the present winter. To allay the great Nervous irritability which generally accompanies the disease producing wakefulness and many other unpleasant symptoms Anodynes may be happily resorted to - If there be much vascular determination to the Brain - Opium or Dovers powder - may be beneficial - when these are contraindicated, we should use Hoffman's Anodyne - Sweet Spts of Nitre - or Camphor water. In the milder cases, in general nothing more is necessary than what I have given -

But frequently, after certain period, has passed a state of affairs, supervene, which require more active treatment. There is a deficiency of secretion. The Tongue is dry and fissured. The skin dry and pungent, and Urine diminished. The pulse though continuing frequent, is less full and strong than at first. Delirium and stupor com

on. The abdomen becomes tympanitic; in this condition of things, Mercury is happily administered. It should be given so, as slightly to affect the Gums, must not be given in large doses; But in doses of 1 to 2 gr — every two hours — until some slight impression is made upon the system,

When the stomach is not irritable it may be combined with a small quantity of opiate, which tends to soften the skin and promote perspiration; But should the symptoms not abate; and as sometimes happens, in the latter stages of the disease, the tongue instead of cleaning regularly and from the edges; throws its dark fur off in large flakes; and from the middle or back part, leaving the surface red Glossy and Dry, we have no remedy to act as happily as the oil of Turpentine. It acts in some degree as a stimulant, but chiefly as an alterative, upon the ulcers formed, in the intestinal mucous membrane — It should be given in doses of from 5 to 20 gtts every two hours in an

emulsion of Gum Acacia, Loaf Sugar and water. The debility of the patient is often such as to render it necessary, to support the system, by means of Tonics and Stimulants. The best of which are. Wine, Wine Whey, Brandy, Arrowroot & Sulph. Quinia. It may sometimes be found useful to use some means both nourishing and stimulating throughout, the disease. The best of which is Beef Tea — &c. As regards Diet no thing is of more importance in the management of Typhoid Fever. In the early period, it should be, bland and nutritious, composed mostly of Liquid Substances, such as Tapioca, Arrow Root, Gruels, Toast and water, Cold Lemonade, Orange Acidulated Carbonic Acid water, and Flaxseed water, may be used as drinks — or if in a more advanced period if the patient become debilitated. A little wine may added to the Tapioca &c. or he may have Beef Tea and Jellies in small Quantities and gradually increased after convalescence is established, the diet should be nutritious and easily digested such as Fish and Oysters, Jellies, soft boiled Eggs and Oysters. And not in large quantities.

An

Inaugural Dissertation

on

Anaesthetics.

Submitted for Examination

to the

Provost, Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine,

& Respectfully Dedicated

to

Professor Mittenberger.

By

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of

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Virginia.

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Anaesthetic Agents

The medical world has been agitated for the last few years, by the introduction into the practice of surgery, of certain agents, capable of annulling pain, not only in [illegible] surgery; but also in medical and obstetrical practice. It is now an established fact that the inhalation of certain vapors will produce insensibility to pain, even when the most sensitive [illegible] of the human body are being divided by the knife, the patient lying in a state resembling an undisturbed slumber.

The introduction of ether and chloroform into surgical practice, forms a most important era in chirurgical history. [illegible] hold an important [illegible] in science of the present century. Although but a brief period has [illegible] since the first made known to the world, yet the profession generally may now be said to be familiar [illegible] their properties. This discovery like every improvement of real [illegible], was not [illegible]

more approbation of the profession it is true; but so great a majority of them,— including all, or nearly all, of the most profound scholars, in the profession, both in this country and in Europe,— have adopted it into their practice, [illegible] the evidence of our own senses in this matter, that there can be no longer room for doubt of its efficacy.

There is in the medical profession a class of men who, content to move on in the same old paths in which their fathers walked,— look upon all modern improvements, as [illegible] "the most ancient customs and practices [illegible] sectors." Too indolent to investigate the [illegible] themselves, and too bigoted to profit by the investigations of others, they [illegible] the world and [illegible] "[illegible]." [illegible]

There is another class and [illegible] [illegible]

son the new, and ready to swallow down, without mastication, every [illegible] [illegible] [illegible] to the [illegible]. Now we find them practising Homœopathy; "Similia similibus curantur," is their motto; and anon, we find them expatiating upon the wonderful cures effected by Hydropathy. But it is [illegible] investigation of [illegible] the progress of science is retarded by these labors, [illegible].

Between the two we scarcely know which to choose. The first it is true does no actual harm; it is rather a negative than a positive character, — that is, it is [illegible] that a thorough acquaintance with his business would teach him, ought to be [illegible] [illegible] inclined to give [illegible] [illegible] investigation, takes everything for granted, [illegible] and thus makes much harm. The one is in favor, the other, of commission, and I imagine the [illegible] [illegible] the [illegible].

Fortunately for science, there [illegible] medium between the two, [illegible] are here many

who are disposed to treat every new process which may be suggested to their minds in the course of investigation, and give it withheld the [illegible] accordingly as it stands, or falls stand, the test of a thorough investigation and practical application.

In the first class, may be [illegible] those who are the phase etherization, and perhaps to the second [illegible] those who have failed in its use, or in whose hands it has had deleterious effects.

[illegible] of the anesthetic agents which I am about to speak have been in use but a short time, yet they have been administered in many thousand instances, and with such uniform success, that I have called [illegible] the almost [illegible] [illegible] of the [illegible] of them.

Ether. The use of ether as a medical agent, appears to have been [illegible] years since by different practitioners. For instance, Dr. [illegible] and others seems first to have made use of it, by inhalation, in the treatment of [illegible] the phenomena in combination with narcotics.

His communication [illegible]

made in the first volume of the "[illegible] of Medicine" 1796. He states that [illegible] to children [illegible] by inhalation through a funnel, or a pot-lid, [illegible] the chest.

Some disputation [illegible] in the [illegible], which ended in 1803, he appears from this time to have abandoned it. Afterwards a Dr. Thornton administered it to a lady who had a painful affection of the breast. He states that this lady, after inhaling for about five minutes, fell back in a state of [illegible], and remained in that condition for the space of ten minutes, and then awoke free from pain.

About the commencement of the present century, Dr. [illegible] of [illegible], may also be said to have made use of it, but [illegible] effect [illegible] results, we are not informed.

In 1815 Nysten speaks of its use in colic, a disease in which it has recently been made use of, with the most happy effects. Dr. Hargrave of Dublin states that [illegible] scarlatina [illegible] in a young lady [illegible]

the land.

But the first [illegible] of the [illegible] purpose of annihilating pain under a great [illegible] belongs to Dr. Morton [illegible] of Boston [illegible] of Dr. Jackson, a distinguished chemist of the same city.

The following account of its discovery [illegible] agent is applied, from the Boston [illegible]: "Dr. Morton had been for a considerable time engaged in the inquiry for some means of obviating pain in his own branch of the [illegible] profession, and [illegible] to the great [illegible] of his investigations. Dr. Jackson [illegible] in the last of Dr. Morton, [illegible] sulphuric ether, [illegible] produce insensibility, and suggested that it might be [illegible] Dr. [illegible] this hint, Dr. Morton experimented upon himself by inhaling through a sponge, [illegible] the ether, and found, on reference to his watch, that he had [illegible] himself insensible, and had remained so for eight minutes. He [illegible] the [illegible] with success. This was in Sept. 1845."

Thus it appears that the idea of [illegible]

by etherial inhalation, was Dr. Jackson's. The [illegible]
tion of that idea, belongs to Dr. Morton.

It would have been an instance almost without a precedent in history, had the author of this great discovery, been shielded to wear the laurels of [illegible]. As almost in all similar instances, it has been [illegible] of these pretenders, who are ever ready to appropriate to their own aggrandizement, the proceeds of the labors of others — not only in this country, but in England and France, who have preferred their claims, as the discoverers of the [illegible] anæsthetic agents.

One bases his claim upon a certain book [illegible] published [illegible] years earlier than [illegible] himself — in which it is said that the [illegible] in fact [illegible] substances [illegible] would be insensible to pain. Another says the [illegible] of a deceased friend who had experimented with carbonic acid gas [illegible] under consideration. Dr. Wells of Ct. [illegible] is considered to be the author of this discovery, but it appears that his experiments [illegible]

[illegible] witness [illegible]

Nature and mode of preparing ether.

The agent made use of for inhalation, is rectified sulphuric ether. The chloric and acetic have been used, but the sulphuric has been found more agreeable, and equally as potent, although, lately, some contend that the chloric is more agreeable than the sulphuric, [illegible] former in preference to the latter. The nitrous ether [illegible] suffocation of the chest, with incessant coughing. The agent [illegible] must be perfectly free [illegible] the other of commerce [illegible] or the acetic or formic acids, it is entirely unfit for the purpose of inhalation.

The following is Dr. Jacksons method of making pure ether;— "The compound [illegible] radical, called ethule, which is represented by the formula C4. H5., and symbol Ae.

Pure sulphuric ether is regarded as a mixture of ethule, and is represented by the formula C4. H5. [illegible] symbol is Ae6. It is prepared by decomposing highly rectified alcohol, by means of sulphuric acid. [illegible] of alcohol, of 90 per cent. sp. gr. [illegible]

with sulphuric acid, 9 parts, in a copper, or iron vessel, in cold water. The action of s[illegible] acid on alcohol is catalytic; bi-sulphate of [illegible] acid of ether is formed, which by the saturation of the [illegible] ebullition, is decomposed [illegible] the [illegible] passes over in vapor. The sulphuric acid [illegible] a portion of undecomposed alcohol. The [illegible] passes over the vapor no longer remaining with the ether. The distilled liquid is [illegible] to be [illegible] an alcoholic solution of potash, to neutralize the acid, and render it slightly alkaline. It should then be redistilled in a water bath, and the operation should be [illegible] until [illegible] has attained the specific gravity of .72 at 60° F. The specific gravity may be still further [illegible] by allowing it to stand several days over dry chloride of calcium, and then redistilling it in contact with that substance. Ether then [illegible] should [illegible] change the [illegible] properties of [illegible]

Chloroform

For the introduction of this [illegible] of the profession, as an [illegible] dated to Prof. J. Y. Simpson of Edinburg.

Although chloroform was known in the country and France, yet the first application of it for the purpose of annuling pain belongs to Prof. Simpson, who first ventured to administer it in obstetrical practice.

The advantages of chloroform are various. 1st. Its more rapid and [illegible] tion, it being about eight times as [illegible] 13 of chloroform is equal to 1 of ether. 2nd. The muscular, muscular, and intellectual exits and is much less under its influence than the 1st of the and 3rd. The full inspiration of chloroform is effected in 30 or 40 seconds, whilst with ether it requires 4 minutes; in both cases, the time varies much, in different individuals. 4th. The odor of chloroform is more agreeable than that of ether, and produces less irritation of the [illegible] passages.

But on the other hand [illegible] distinguished surgeons, after a fair trial of both [illegible]

to the use of ether, as they consider it [illegible] equally as efficacious; others on the other hand, contending that chloroform, whilst it is more prompt and energetic, at the same time [illegible] [illegible] of N. Y. remarks upon this point;— "We have been in the habit of using the chloroform in the N. Y. Hospital to the exclusion of ether [illegible] brought to the notice of the profession of this city, but on account of the greater risk in the use of chloroform, I am disposed to return to the use of ether."

Dr. Sargent of Boston, says that he has used ether in hospital and private practice since its first introduction without any bad effects in a single case, and he then states;— "I have also used chloroform to a considerable extent, and it has [illegible] the [illegible] case with [illegible] [illegible] of ether." Dr. Homer of Philadelphia, after stating that he has used ether extensively, says;— "[illegible] time in its action, subjecting the patient to high excitement [illegible] [illegible] gives it as his opinion that [illegible] [illegible]

it may be after [illegible] fore that period.

[illegible] administered many operations under the [illegible] and zinc, and always without any accident [illegible] ent. That there is danger in the use of powerful agents, there can be but little doubt. But [illegible] imagine that an article capable of producing such powerful effects, — in the hands of the [illegible] and [illegible] be capable of producing injurious effects. Like everything [illegible] of the [illegible] judicious hands they act upon the system with the happiest effect; but carelessly used, will destroy life. [illegible] most powerful therapeutic articles we have, because, improperly administered, they may cause death?

By [illegible]

Opium, [illegible] disease is perhaps [illegible] more inoperative, than any [illegible] destroyed more death [illegible] consumed, in the same space of time [illegible] in season, [illegible] any article of any value [illegible]

carried to too great an extent, will produce unfavorable effects, and even death. By referring to the statements made by several of the most eminent surgeons of the present day and those who have had the most experience in the use of these articles, we find that they very generally recommend [illegible] a large quantity of [illegible] accompanied with [illegible] effects following the administration.

Different articles have been tried, to produce anæsthesia, some of which have had that effect, but [illegible] which account [illegible] ether, except perhaps, chloroform, which has been used quite extensively by the surgeons, with good effects. Its effects appear to be the same [illegible] the sulphuric ether, though perhaps less powerful; but its vapor is less irritating to the lungs, and it possesses a more [illegible], two qualities [illegible] recommended it to the [illegible] of the profession. The surgeons of the United States Army have [illegible] article in their practice [illegible] they have succeeded perfectly well.

Nitrous Oxide, has been used for the purpose of producing insensibility [illegible]

The late Dr. Horace Wells of Hartford, has claimed the discovery of anæsthetics. He was, as the discoverer of anæsthetic inhalation. The idea of annulling pain with this gas was suggested to him by Sir Humphrey Davy. On the strength of this suggestion, administered the gas in 1844, with total success. He went to Boston, some years after, and delivered a lecture upon the feasibility of the practice, and explained it to a number of gentlemen of the Massachusetts General Hospital. Failing of success, he abandoned its use and thus the whole matter rested until it was again revived in 1846. Shortly after the discovery of anæsthesia, the use of it in surgical operations became general. Dr. Sigelin, of Vienna, says in his report to his government, that he removed a breast, by the aid of about twice that quantity, which was consumed in the space of about six minutes, without any trouble, and complete insensibility."

It appears to me that the great [illegible] of the agent [illegible] effects [illegible] to its several uses. Several other articles have been mentioned, such as [illegible], Nitrate of Silver, the Bi[illegible] [illegible] and Br[illegible] [illegible] having anæsthetic properties on the [illegible].

Time required to produce other effects. The [illegible] very much in different individuals, according to the [illegible] of the [illegible] and the [illegible] to [illegible]. The time to produce anæsthesia with [illegible] is [illegible], than by other. By the [illegible] produced by [illegible] the [illegible] minutes. In both cases I believe [illegible] the time required is [illegible] at least it has been so as far as I have seen. A [illegible] time is required to produce [illegible] in adult females, than in men. The time in which the patient remains in this state is subject to the same variations as the former period.

In some cases he [illegible] in the [illegible] from 3 to 5 minutes, but sometimes he [illegible] recovering through [illegible] cases, [illegible] effectually administered. The manner of recovery is also very different in different cases. Sometimes we see the patient start up suddenly as from a phrensy or dream; in other cases he is sometime in recovering from its effects; - he is incoherent, staggers if he attempts to walk; - but these [illegible], and no serious effects follow.

Symptoms. During the [illegible] stage of [illegible] there is sometimes a good deal of excitement, amounting in some instances to violence and fury; but if inhalation be persisted in, these symptoms soon subsiding, and are followed by torpor and insensibility. These primary effects are [illegible] it is often found, that [illegible] the effects [illegible] following a small dose, a large one will give almost instantaneous [illegible]. It is sometimes the case, that [illegible] that the phenomena of the [illegible] stage, is entirely [illegible]; though the patient is conscious of every step taken during an operation, yet the

feels no pains. A medical [illegible] informed me once that he had had several teeth extracted, under the influence of chloroform, without the slightest pain, whilst he was conscious of every thing going on in the office, and was able in time to [illegible] where he might find an instrument of which he was in search, showing that he [illegible] the same [illegible] which was [illegible] solitary instance, but occurred to him invariably.

Vomiting is not an unfrequent consequence of inhalation. Its occurrence is often noticed when the inhalation has been continued for a long time, or where it has been inadequate.

The muscular system is often very much affected. In the first stage there is often a good deal of muscular action. The muscular fibre, animated by the nervous influence, [illegible] and extension. Sometimes [illegible]

It is in this stage that those remarkable phenomena take place, in which a person retains his consciousness, but loses the sense of feeling, [illegible] he appears to suffer for the time, but has no recollection

of it afterwards. In the second, a complete [illegible] stherization the muscular system is completely [illegible]. If inhalation be continued from the first stage, the voluntary muscles gradually become relaxed, [illegible] down by the sides. The involuntary muscles continue to perform their offices but with reduced energy. [illegible] breathing is easy, as in a tranquil sleep; the functions of the heart are gradually reduced, both in force and frequency, while the sphincters relax [illegible] contractility. Among this symptom [illegible] deep sleep. It is said to be caused by a relaxation of the muscles of the palate. When this symptom sets in, inhalation is to be momentarily suspended. Stertorous breathing, may it is said, [illegible] the action of the vocal chords, and connection [illegible] the spasmodic action of other muscles; is a symptom of rare occurrence. I have never seen it. [illegible] as that inhalation is to be suspended [illegible] The pulse and pupil. The pulse is at first accelerated, afterwards [illegible] capricious. The pupil is at first contracted, and afterwards dilated, but not to be depended upon in all cases.

Contra-indications. Chloroform and [illegible] to be exhibited, where there is disease of the heart or lungs; — where any part of the lungs is unfitted for respiration, from hepatization, tuberculosis, pleurisy, effusion, or from any other cause; or where there was obstructive disease of the heart, or dilitation of its cavities, or any other disease, functional, or organic.

In order to detect [illegible] the physical examinations should be made, that is, auscultation, percussion, &c. Where there is a tendency to apoplexy, its employment is attended with risk.

The surgical period is the time when the patient is completely under the influence of the anæsthetic. This period is marked by the dilitation of the pupil, relaxation of the voluntary muscles, the arms drop by the side, — the pupil is turned up under the eyelid, — he takes no notice of attempts made to move him by cutting, pinching, &c. The operation is now to be commenced, and in [illegible] of complete narcotism, the inhalation is to be suspended, and again returned on their passing away.

Dr. Warren has [illegible]

venient means of enabling him to make painful exploration of the bladder. He says, "The operation of lithotrity has been [illegible] by the use of ether [illegible]. The patient, instead of resisting the [illegible] of the operator, by his movements, — experiencing no pain, lies perfectly tranquil." He does not say that he performed the operation of lithotrity in the [illegible], or [illegible] searched for the stone. However useful anæsthesia may be in exploring the bladder, I should think that in the operation of lithotrity, it would be contraindicated, for in crushing the stones, our instrument might injure the coats of the bladder, and thus do an irreparable injury, while our patient being unconscious of pain, would not give us warning of the injury being done.

Etherization has been used in some cases, in the practice of medicine, and with good effects in many cases. In neuralgia it has removed the pain, but only for the time being, or effected a permanent cure I am not able to [illegible]. It is stated that a patient, suffering a most excruciating pain, in neuralgia of the head and face, — inhaled [illegible], [illegible] [illegible] and

that it had lost its severity, and settled down into a dull, endurable pain. The acute pain did not return.

In colic pictonum, and dysmenorrhœa, inhalation has been successful. In tetanus, inhalation has occasionally had a good effect; - though some, have thought that the symptoms were aggravated by its use. In some cases, relaxation of the muscles has followed its administration, but this relaxation has rarely been [illegible] in character. In sciatical practice, chloroform was first attempted by Prof. Simpson of Edinburgh, with success, and [illegible] extent. It is said to prevent pain, while at the same time it does not suspend the contraction of the uterus and abdominal muscles. It relaxes the resistance of the perineal muscles, and does not produce any injurious effect [illegible]

Physiological effects. The physiological effects of these articles upon the system has been [illegible] the [illegible] and the [illegible] with intoxication - and some as different from [illegible]

to obtain, than either of the other two, but

[illegible]

[illegible], which seems merely to deaden sensibility in the o

[illegible]

[illegible] those of the spinal marrow, and are also re-

[illegible]

[illegible] after the intellectual faculties are suspended,

[illegible]

action. During insensibility, arterial blood becomes of

a darker color, [illegible]

[illegible] oxygen, we should therefore expect [illegible]

[illegible] be the case under the use of chloroform, which

as has already been seen, contains no oxygen. I have

[illegible] that a [illegible]

had [illegible]

applied in [illegible]

[illegible] approve of it in toto, or confine its application to

[illegible]

[illegible] is necessary in a surgical point of view

[illegible] is known to exist, but this cannot be true in

[illegible] in fact, by contribution to what is termed

"shock" is often the cause of death.

It is true, that in many cases it is necessary for the patient to feel pain; for instance, the operation of lithotripsy, of which a bone before of pain, [illegible] of lacerations about the fauces, &c.

Another more serious objection is that [illegible] diminish their employment, but of which, also, we have little opinion. In obstetrical practice, it is objected, that as the pains of labor were inflicted by the Almighty upon our first mother, and [illegible] injection would annul the decree; but if this idea is to be [illegible] during the dangerous [illegible] there are [illegible] explicit [illegible] the patient to her fate, bleeding on our expense, that [illegible] should not be lifted against his Maker.

Such reasoning is [illegible] following, in an enlightened age. In reviewing the [illegible] that naturally arises are their beneficial effects, what they are represented to be, or are they [illegible]

I am aware many new remedies have for a time received the enthusiastic [illegible] of [illegible] of the profession, but after [illegible] have been found to prove of little, or no intrinsic [illegible]. Such may be the case of the [illegible], but it seems to have been [illegible] that [illegible] there can be no reality in its boasted powers. The [illegible] discovery prove an inestimable discovery and blessing to the human race; and it is with feelings of national pride that we reflect that to American genius is science indebted for this invaluable discovery.

But let not considerations of this kind [illegible] our judgement. Let us investigate [illegible] and, in a candid spirit of [illegible] and let it stand or fall upon its own intrinsic merit. There are various ways of [illegible] this, but the most usual is by the following [illegible]

℞. Chloride of Zinc, in powder, lbs. iv. Water lb. xii. [illegible] of [illegible] lb. xii. [illegible] in a large [illegible] and [illegible] as long as may be [illegible]

drops in the water with which it comes over, is produced. The chemical constituents of Chloroform are 2 atoms of carbon, 1 of hydrogen and 3 of chlorine. Sp. gr. 1.48. Boiling point 142°

Density of its vapor 4.2. Distilled with potassium, potash, or any of the acids does not effect upon it, neither is it inflammable.

It is not a little singular that the compound bodies so different in constitution from Sulphuric Ether, and Chloroform should have so nearly the same effect upon the system when inhaled into the lungs.

Nor is it surprising, that though a small portion of inhaling Sulphuric Ether, may be so irritating to the lungs, yet a mixture which consists of ether and chloroform of alcohol, induces little or no irritation to the air passages, and is preferred by many.

The discovery of chloroform was the result of inquiries and experiments made by Soubeiran, Liebig, and Dumas.

A

Inaugural Dissertation

on

[illegible]

submitted to the examination

of the

[illegible]

to the

University of Maryland

for the

degree of Doctor of Medicine

by

[illegible]

Anne Arundel county

Maryland

February 1883

[illegible]

[illegible] would [illegible]

will [illegible]

composition. [illegible]

[illegible]

or Acute [illegible]

attack [illegible] portion [illegible]

the haemorrhagic [illegible]

organ. The [illegible]

[illegible]

characte[illegible] [illegible]

diagnosis may [illegible]

either of the [illegible]

varying [illegible]

41. Disease [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

in the first-mentioned class.

Symptoms. Hepatitis commences [illegible]

in the right [illegible] side, [illegible]

and lancinating if the peritoneal surface

of the liver is diseased, dull and heavy

if the parenchymatous structure is inflamed

it is intermittent and paroxysmal [illegible]

again continued and persistent, increased

by pressure from [illegible]

also by a deep inspiration from the

descent of the diaphragm upon the

tender and diseased organ. The occurrence

of pain in the right [illegible]

to indicate [illegible] in the [illegible]

especially of the right [illegible], equal [illegible]

and tenderness in the [illegible]

in the epigastrium is indicative of disease

in the left lobe and [illegible]

the liver. Numerous symptoms may [illegible]

[illegible] to [illegible] [illegible] the [illegible]
portion is diseased. Gastric and intestinal
usually [illegible] [illegible]
portion of the organ is inflamed. Previous
to or simultaneous with the occurrence of
pain, there is a chill, followed
by high febrile symptoms, from which
the patient usually dates his attack.
There is also cough associated with
Hepatitis, at first dry and short, afterwards
becoming [illegible] [illegible]
It is sympathetic of the disease in the
neighbouring organ, or as sometimes happens
there may be simultaneous bronchial
inflammation. Fever [illegible]
character, [illegible] [illegible]
[illegible] and [illegible]
Tubercles are [illegible]
of great value in the diagnosis
of [illegible]

pathognomonic of that disease; as it occurs in the course of [illegible] of the [illegible]. Nausea and vomiting also occur in the course of the disease, vomiting at first the [illegible] [illegible] of the stomach, afterwards bilious matter, possessed of highly acid properties. The tongue is covered with a yellow fur and has a [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. The bowels are usually constipated in the [illegible] attack, but a relaxed condition is sometimes met with. The [illegible] [illegible] [illegible] [illegible] [illegible] enormously so. The posture of the patient is of some value as a sign [illegible] [illegible] raised and [illegible]

lies in the side down on the right side lying on the left side increasing the tension of the ligaments on the right side of the enlarged liver. With of the waters and that prevents you from lying on the left side. The liver is high round and scanty, and sometimes loaded with bilious matter. The mind is very much disturbed, irritable, strange and melancholy. There is an intense thirst of a patient becoming, inclined to a great torpor upon the slightest bad or evil news. Unless they are the usual terminations of Bilious fevers, the most frequent are the Resolution, Suppuration, chronic hepatitis of the organ, of these by far the happiest is into Resolution. It is followed by a gradual amelioration and subsidence of all the symptoms. The pain

symptoms abate. the pulse is diminished in force and frequency, and becomes more regular. the heat of skin is diminished [illegible] condition. pain in the hypochondrium and tenderness over that region gradually disappear. the tongue cleans, at first from its tip and edges, and all the functions resume their wonted actions and the patient is [illegible] restored to health. The occurrence of suppuration is known by a general chilliness or a decided chill, a sense of heaviness or fluctuation in the region of the liver, with a diminution of pain, increased frequency of pu[illegible] not so [illegible] and [illegible] and [illegible] with great irritability of the system and exhaustion, the most favourable [illegible] incision

[illegible] to repair. Hence [illegible]
be to the [illegible] common
adhesions between the [illegible]
[illegible] and the [illegible] viscera,
forming a [illegible] [illegible] out of
the sac, but [illegible] though [illegible]
[illegible] of the sac, [illegible] the
place. It sometimes [illegible] the
peritoneal cavity in consequence of unskilful
adhesions [illegible] in past [illegible]
that membrane; from which circumstance
the patient is usually carried off rapidly
by the [illegible] of a [illegible], or adhesions
may form between the [illegible]
and between the [illegible]
thus forming [illegible]
into the [illegible]
[illegible] Hernia, [illegible]
[illegible] inflammation of that [illegible], and
[illegible]

[illegible] taken place, or when the hepatic ducts has been broken down in the course of the [illegible] suppuration. It may be discharged into the duodenum by the ductus communis without causing any great disturbance of the [illegible] or [illegible]. It [illegible] discharged into the stomach sometimes [illegible] [illegible] the abscess is [illegible] the lower portion of the liver, in which [illegible] of the stomach adheres to that of the liver, in [illegible] vomiting, which [illegible] the [illegible] important [illegible] in Hepatic Abscess [illegible]. It [illegible] has escaped in some rare instances into the [illegible] vena cava, kidney, or pericardium. Disease of the [illegible] is a frequent concomitant of

[illegible] also frequently occurs and especially ascites, is the cause of diseased liver. Other diseases of the Alimentary Canal may arise from the same cause, as Dyspepsia, Diarrhoea and Dysentery, from the intimate sympathetic relation between the liver and Alimentary Canal. Other organic affections of the liver [illegible] as cysts, hydatids or tubercles, but more frequently from chronic inflammation of the organ.

Causes. The most common causes [illegible] are a long [illegible] malarious [illegible] which produces a [illegible] of the mucous [illegible] [illegible] up in the [illegible]. Inflammation of the liver is a frequent accompaniment of Intermittent or Remittent [illegible] [illegible] more [illegible] [illegible] as a cause of Hepatitis. [illegible]

[illegible] Hepatitis is long continued exposure to heat, which accounts for its [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] [illegible] [illegible] will tend to produce the disease, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] of excess in [illegible] [illegible] food. The abuse of [illegible] [illegible] [illegible] [illegible] [illegible] of excessive grief or other emotions and long continued mental depressions. The [illegible] [illegible] noted in the course of [illegible] [illegible] [illegible] [illegible] [illegible] vessels. [illegible] [illegible] [illegible]

Age and sex [illegible] to exert some influence in the [illegible] of the disease but more in consequence of females and children being less exposed to the disease than are males and adults.

Diagnosis. The only disease with which Hydatids might be confounded is Phlegmonous [illegible] which may be distinguished by the absence of the intervascular spaces in Phlegmon. In Phlegmon with effusion the intervascular spaces are entirely obliterated from the pressure of the liquid seeking the most yielding places whereas in Hydatids there is a more general separation of the parts from the fluid [illegible].

Anatomical Characters. [illegible] occurring in the [illegible] [illegible] cases an opportunity [illegible] for examining its [illegible]

When it does come fatal. The mucous
peritoneal coat presents marks of inflammation
. It appears redder and more vascular, and
much thickened, and sometimes covered
with a stratum of coagulable lymph
becoming vascular and organized.
which are occasionally mixed with
the liver and neighbouring organs, or
the parenchymatous tissue of the
organ, it is found enlarged, sometimes
to a very great extent, coagulated
blood, softer than natural, and pulpy
when cut is brighter and redder
than natural, with crushing a bland
fluid is also a milk chylous. I saw
the outer surface, the organ is enlarged
and indurated. from the [illegible]
coagulable lymph into its tissue.
Occasionally instead of inflammation there
is softening of the organ, the [illegible]

structure is [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] a pulpy mass. But the most frequent condition presented is the presence of [illegible] either on the surface or in the parenchyma of the organ. There may be one or more, at the same time, in the liver, from the size of a small pea to that of a [illegible] the whole substance of the organ consists of the liver, as it were, of a [illegible] Occasionally there is a [illegible] coming from an [illegible] cyst but simple. The cyst wall is [illegible] appearance, or is sometimes [illegible] from the presence of [illegible] cases to various [illegible] of [illegible].

Treatment. In regard to [illegible] [illegible] rule the [illegible] liver. Drainage is of the utmost importance, [illegible] [illegible] made to [illegible] in the strength of the patient. The fulness and

frequency of pulse the [illegible]
and the period at which you see the
patient. No general rule should ever be
given for bleeding or [illegible]
until some [illegible] the
patient or the diseased condition.
Associated with general bleeding it
is nothing that rule [illegible]
much as local bleeding, either by means of
cups or leeches. [illegible]
by means of the former, when there is not
so much tenderness, as [illegible]
[illegible] inflammation, and [illegible]
particularly in [illegible]
effect the produce in consequence
their depletory action. But we
[illegible]
under their influence [illegible]
then we have a less painful
resort to. in the case [illegible]

may be applied either on the seat of the affected organ, or in the [illegible] around the [illegible] of the [illegible] in the case [illegible] the inflamed organ, so assist in the [illegible] effects of venesection, supplies must have recourse [illegible], as relieving the hepatic [illegible] of [illegible] conditions by [illegible] the vessels of the liver which [illegible] Mercurial Purgatives are indicated [illegible] nature of these [illegible] of these the submuriate may be employed. or in case there is great unfavorable or a great unwillingness to the use of Mercurials. the Mercurial bill may be given, [illegible] after [illegible] of time by [illegible] the [illegible] or castor oil, [illegible]

The Saline Cathartics should be used

[illegible] is that there will not [illegible]
the stomach, and therefore keep the [illegible]
When there is great restlessness and want
of sleep at night, a [illegible] of opium [illegible]
the [illegible] at night, or [illegible]
better, when there is no [illegible]
stomach, and often hot and [illegible]
of bowels under. If [illegible]
occur, it may be controlled by the
effervescing draught, sulphuric acid
and external fomentations, or else
should the [illegible] applied on
the region of the liver, tending to quiet pain and
relieving tenderness, etc. [illegible]
above described means, when [illegible] are
not effect a cure, the [illegible] and
should be [illegible] to [illegible]
ulceration, after which [illegible]
the [illegible] described. [illegible]
as previous [illegible]

constitutional [illegible] of mercury, [illegible] which should be used in the active inflammatory stage of the disease. More advantage is derived from a succession of Blisters. [illegible] salivation ensues from the constitutional impression of Mercury, it must be withheld for a time, and [illegible]

The continuance of inflammatory symptoms should the stomach revolt at the internal administration, now may then resort to its external application by means of the ointment, or as is sometimes done, [illegible] [illegible] surface with mercurial [illegible]

Should [illegible] of suppuration, you will then have [illegible] debilitating flow of lymph [illegible] exudation, the indication now [illegible] to [illegible]

present ... support th... of the ... ... the ... ...

[illegible]

side also are of use. ... of the ... may be ... by ... ... But ... the Sulphate of Quinine may be used as ... the best. In the commencement ... ... consisting ... articles of diet. When ... ... taken place, a more ... ... consisting of broths eggs, oysters ...

... Above ... have a ...

Helena 1863